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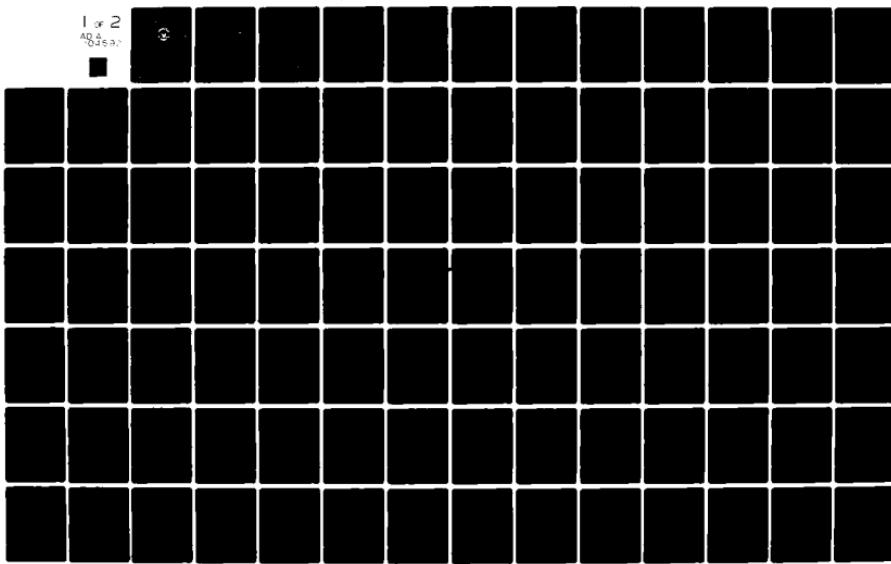
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INTERGENERATIONAL OCCUPATIONAL INHERITANCE  
IN THE NAVY

by

Katherine Sue Robinson

June 1981

Thesis Advisor

Professor George Thomas

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Integenerational Occupational  
Inheritance in the Navy

by

Katherine Sue Robinson  
Lieutenant Commander, United States Navy  
B.A., University of Kentucky, 1972

Submitted in partial fulfillment of the  
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

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## ABSTRACT

This thesis studies differences between Navy Personnel whose parents had had military service, referred to as juniors and those whose parents did not serve in the military, nonjuniors. Among Navy personnel surveyed in the 1978 DOD Survey, juniors entered the service earlier than non-juniors, but exhibited few differences from nonjuniors in attitudes toward the military and in career and reenlistment intentions. Juniors of career personnel entered the Navy in proportions up to four times their estimated proportions in the national population, indicating the existence of strong intergenerational occupational inheritance in the Navy.

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## I. INTRODUCTION AND LITERATURE REVIEW

The purpose of this thesis is to examine the role of Naval personnel whose parents also had military service. Those personnel will hereafter be referred to as juniors. Specifically, this thesis will attempt to determine if juniors differ in socioeconomic characteristics from non-juniors, whether juniors and nonjuniors have differing opinions of the military or different career intentions, and whether juniors are more likely to enter the Navy than are nonjuniors.

If juniors do show differing attitudes or rates of entry into the military than do nonjuniors, this may have implications for Navy policies. The Navy may wish to direct advertising efforts to this segment of the population. Alternatively, study of what influences a junior to join the Navy may show that some particular kind of information is available to them that may not be available to the general population. Advertising could then emphasize this special information. Within the Navy, attitudes and retention differences between juniors and nonjuniors could be similarly explored to see if improvements in retention could be affected.

### A. INTERGENERATIONAL OCCUPATIONAL SUCCESSION

Intergenerational occupational succession refers to the inheritance of an occupation from one generation to the next. Very little literature addresses the question of relative rates of occupational succession. Most information that is available [Ref. 1, 2, 3, 4] appears as the byproduct of studies of intergenerational occupational mobility of civilians, particularly the upward movement of sons to a higher

occupational strata than that of their fathers. In general, these studies [Ref. 5, 6, 4, 1] are based primarily on data from the Occupational Changes in a Generation (OCG) surveys conducted in 1962 and 1973 by the Bureau of the Census. Occupations in the surveys were classified into seventeen occupational strata. Researchers using both these and other surveys have found that sons had a greater probability of entering their fathers' occupations than for movement into other occupational classes. [Ref. 3: p. 68; Ref. 4; Ref. 5: p. 36; Ref. 6: p. 586; Ref. 7: p. 15]

Tables 1.1 and 1.2 [Ref. 1: pp. 536-537] show, for the 1962 and 1973 OCG surveys, what the fathers' occupations were for the respondents in each of the occupational categories. For example, in 1962, 16 percent of the respondents in the manufacturing operative category (Category 13) had fathers whose occupation had been that of manufacturing operative when the respondent was sixteen. In 1973, the percentage had lowered to 15.5. Table 1.3 [Ref. 3: pp. 70-71] shows similar information from a survey conducted in 1957. The fathers' occupations in Table 1.3 are those the father held while the respondent was "growing up." Here, 32.8 percent of semi-skilled workers had had fathers who were also semi-skilled.

Also of interest are the mobility ratios shown in Tables 1.3 [Ref. 3] and 1.4. [Ref. 4: p. 32] These ratios are the ratio of the observed number of people in an occupational cell to the number that would have been expected if individuals from all fathers' occupational classes had had equal opportunities of choosing that occupation. In Table 1.4, for example, the ratio for manufacturing labor is 3.3 for sons whose fathers

TABLE 1.1

Mobility from Father's Occupation to Own Occupation:  
Men in the Experienced Civilian Labor Force Aged 21-64 in March 1962, Percentages

Father's Occupation When Son was 16	Own 1962 Occupation																
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. Professionals, self-employed	15.3	4.0	1.7	4.7	0.9	0.9	1.1	0.4	0.5	0.6	0.5	0.3	0.4	0.2	0.8	0.5	0.5
2. Professionals, salaried	7.3	10.1	5.4	6.2	2.3	4.3	3.2	1.7	2.0	0.6	2.4	2.4	2.3	1.6	0.5	0.6	0.2
3. Managers	9.5	8.4	9.0	7.5	4.3	5.5	2.8	3.1	3.4	2.4	1.0	1.3	1.6	1.7	0.9	0.3	0.2
4. Salesmen, other	5.9	3.6	5.6	8.3	2.8	2.1	4.7	1.0	1.5	0.8	1.0	1.1	0.6	0.4	0.9	0.5	0.2
5. Proprietors	20.3	10.1	17.4	13.9	17.8	7.3	17.1	3.8	5.8	6.5	4.2	3.7	3.8	1.6	2.6	1.5	1.7
6. Clerks	5.3	7.7	5.0	5.9	2.6	5.2	3.2	3.1	3.5	1.3	3.5	2.1	1.6	1.7	1.4	0.8	0.0
7. Salesmen, retail	0.9	2.5	3.4	4.7	3.0	2.1	3.4	1.4	1.8	1.1	1.6	1.5	0.4	1.4	1.1	0.0	0.0
8. Craftsmen, manufacturing	4.1	9.0	6.7	4.6	5.7	6.8	7.8	13.1	5.6	5.6	5.5	5.6	7.2	5.7	4.0	0.5	0.7
9. Craftsmen, other	4.3	7.6	8.1	8.2	6.5	8.7	8.1	7.3	12.3	6.2	6.0	8.5	6.2	4.4	5.1	1.1	1.3
10. Craftsmen, construction	3.0	3.6	4.6	4.3	6.1	6.8	3.5	7.3	6.1	16.5	5.1	4.6	4.4	3.2	5.6	0.8	2.4
11. Service	2.4	4.0	4.4	4.9	4.1	7.2	5.1	5.3	4.6	5.4	10.6	6.0	5.8	6.0	4.4	0.8	0.5
12. Operatives, other	2.9	7.5	4.7	5.9	6.7	6.9	6.9	7.3	9.2	7.0	8.3	11.9	8.2	6.7	7.8	1.2	4.2
13. Operatives, manufacturing	5.6	7.2	5.9	6.8	6.5	9.1	7.7	14.1	8.5	5.3	9.1	8.2	16.0	16.0	8.2	1.2	4.3
14. Laborers, manufacturing	0.0	1.0	1.2	0.4	0.9	1.6	1.7	2.8	1.6	1.0	3.5	2.3	3.5	6.9	3.3	0.6	1.1
15. Laborers, other	1.0	2.4	1.9	3.2	2.2	6.0	4.8	4.6	5.3	5.1	7.0	6.1	5.8	7.2	11.3	0.7	2.9
16. Farmers	11.8	10.8	14.0	10.0	26.0	17.7	17.2	21.1	25.6	31.9	30.4	27.6	31.8	35.3	84.9	64.8	
17. Farm laborers	0.3	0.5	1.0	0.4	1.6	1.7	1.9	2.6	2.5	3.6	4.3	3.7	4.4	6.4	2.9	15.0	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

Source: Featherman &amp; Hauser, Ref. 1.

TABLE 1.2

**Mobility from Father's Occupation to Own Occupation:  
Men in the Experienced Civilian Labor Force Aged 21-64 in March 1973 (N = 10,553)**

Father's Occupation When Son was 16	Own 1973 Occupation																
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. Professionals, self-employed	10.9	3.1	2.0	2.0	1.4	0.7	1.6	0.5	0.8	0.8	0.7	0.5	0.2	0.5	0.3	0.2	0.3
2. Professionals, salaried	13.0	13.6	6.9	6.2	2.3	6.1	5.8	3.3	4.0	2.8	4.0	2.8	2.6	2.8	2.7	1.4	1.0
3. Managers	13.8	10.3	12.9	12.4	6.2	5.1	10.9	3.3	4.3	2.3	5.1	3.3	2.1	1.8	3.0	0.9	2.0
4. Salesmen, other	5.8	3.7	4.2	7.9	1.9	2.3	3.4	1.3	1.8	1.1	2.1	1.3	1.0	0.7	1.4	0.1	1.2
5. Proprietors	9.1	6.1	8.5	10.3	12.7	4.7	7.1	3.7	3.4	4.5	3.3	3.6	2.5	2.6	2.7	2.1	2.2
6. Clerks	4.1	7.0	6.0	4.7	2.8	7.0	4.2	3.5	3.0	3.4	4.0	3.3	3.0	3.1	3.6	0.7	1.4
7. Salesmen, retail	5.8	2.1	2.8	4.4	4.3	2.8	4.7	1.5	2.0	1.0	2.0	1.4	1.2	1.6	1.1	0.5	0.0
8. Craftsmen, manufacturing	4.7	8.2	6.4	8.1	5.4	7.8	5.8	11.8	7.3	4.9	6.1	5.6	7.7	5.4	4.7	1.2	1.2
9. Craftsmen, other	3.7	8.1	7.2	7.6	6.6	8.6	8.2	8.1	11.4	6.5	7.3	7.4	6.4	5.7	6.2	2.0	2.0
10. Craftsmen, construction	2.9	5.1	6.2	4.7	7.9	5.7	5.0	5.0	6.8	16.1	5.3	5.7	5.3	3.4	6.6	1.6	4.6
11. Service	5.1	5.4	5.3	4.8	6.2	7.8	6.0	4.9	6.4	5.2	11.0	6.7	6.3	6.5	7.7	0.4	2.1
12. Operatives, other	3.1	5.9	6.3	5.5	6.7	10.3	6.4	9.0	10.5	7.8	8.4	14.8	8.7	6.5	10.3	1.8	5.3
13. Operatives, manufacturing	5.1	7.3	6.6	6.2	7.1	10.3	7.9	14.3	8.7	7.5	8.9	8.4	15.5	14.3	6.3	1.4	1.1
14. Laborers, manufacturing	1.5	1.2	1.6	1.6	1.9	2.1	2.1	3.2	2.4	3.2	2.1	3.2	4.1	7.6	2.8	0.4	1.4
15. Laborers, other	2.2	2.1	3.0	2.2	3.6	4.1	2.7	4.4	4.4	4.7	5.7	5.9	5.8	4.6	8.5	0.6	2.8
16. Farmers	7.9	9.1	12.4	9.8	19.3	11.2	15.0	16.0	17.7	22.6	18.2	19.2	20.8	23.6	23.2	77.6	47.3
17. Farm laborers	1.2	1.5	1.8	1.9	3.6	3.6	3.0	6.2	5.1	5.5	5.8	6.9	7.0	9.2	8.9	7.1	24.1
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

Source: Featherman & Hauser, Ref. 1.

TABLE 1.3  
Occupation of Males, by Father's Occupation, 1957

		Occupation of Male Respondents (in percentages and mobility ratios) <sup>a</sup>						N (100.0%)
Occupation of Respondent's Father	Professional	Business	White Collar	Skilled Manual	Semi- Skilled	Unskilled	Farmer	
Professional	40.4% (4.81)	19.1% (1.45)	12.8% (.91)	19.1% (.72)	2.1% (.12)	4.3% (.47)	2.1% (.18)	47
Business	18.3 (2.18)	25.8 (1.96)	22.5 (1.61)	15.0 (.57)	12.5 (.72)	1.7 (.18)	4.2 (.36)	120
White Collar	20.3 (2.41)	17.4 (1.32)	24.6 (1.76)	20.3 (.77)	10.1 (.59)	5.8 (.64)	1.4 (.13)	69
Skilled Manual	8.5 (1.02)	13.6 (1.03)	15.6 (1.11)	42.2 (1.59)	14.6 (.84)	4.5 (.50)	1.0 (.09)	199
Semi-Skilled	2.3 (.28)	6.3 (.47)	17.2 (1.23)	28.9 (1.09)	32.8 (1.90)	10.2 (1.12)	2.3 (.20)	128
Unskilled	1.5 (.18)	6.1 (.46)	10.6 (.76)	36.4 (1.37)	27.3 (1.58)	15.2 (1.66)	3.0 (.26)	66
Farmer	2.5 (.30)	11.2 (.85)	8.4 (.60)	21.6 (.81)	16.5 (.95)	13.5 (1.48)	26.4 (2.29)	394
All Respondents (N's)	86	135	143	271	93	177	118	1023
Summary Mobility Measures:		Per cent mobile:						
Observed		70.0%						
Structural movement		27.0						
Circulation		43.0						
Full-equality model		84.8						
Cramer's $\chi^2$		.246						

<sup>a</sup> Cell entries in parentheses are mobility ratios, defined as the ratio of the observed cell frequency to the cell frequency expected under conditions of full equality of opportunity.

<sup>b</sup> Some rows do not total to exactly 100.0% because of rounding.  
Source: Taylor, Ref. 3.

TABLE 1.4

Mobility from Father's Occupation to Occupation in 1962, for  
Males 25 to 64 Years Old: Ratios of Observed Frequencies  
Expected on the Assumption of Independence

Father's Occupation	Respondent's Occupation in March, 1962									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. Professionals, self-employed	11.7	3.1	1.2	3.0	0.6	0.7	0.9	0.3	0.5	0.3
2. Professionals, salaried	2.3	3.1	1.6	1.9	0.7	1.2	0.7	0.5	0.2	0.3
3. Managers	2.5	2.2	2.5	2.0	1.1	1.2	0.7	0.6	0.7	0.6
4. Salesmen, other	2.9	1.7	2.7	4.1	1.3	0.9	2.2	0.4	0.4	0.3
5. Proprietors	2.6	1.3	2.3	1.9	2.3	1.0 <sup>a</sup>	2.1	0.5	0.8	0.3
6. Clerks	1.6	2.3	1.4	1.9	0.7	1.4	0.8	0.9	0.5	0.5
7. Salesmen, retail	0.5	1.3	1.8	2.8	1.6	1.0 <sup>a</sup>	1.7	0.5	0.4	0.4
8. Craftsmen, manufacturing	0.7	1.5	1.1	0.8	0.9	1.0	1.1	0.9	1.1	0.8
9. Craftsmen, other	0.6	1.1	1.2	1.2	0.9	1.2	1.0	1.7	0.9	0.8
10. Craftsmen, construction	0.6	0.7	0.9	0.8	1.2	1.3	0.5	1.4	1.1	2.8
11. Operatives, manufacturing	0.7	0.8	0.7	0.9	0.8	1.0 <sup>a</sup>	0.9	1.7	1.0 <sup>a</sup>	0.6
12. Operatives, other	0.4	1.1	0.6	0.8	0.9	1.0 <sup>a</sup>	0.9	1.0	1.3	1.7
13. Services	0.5	0.9	0.9	1.1	0.9	1.5	1.2	1.1	0.9	1.1
14. Laborers, manufacturing	0.0	0.6	0.7	0.2	0.5	0.7	0.5	1.5	0.8	1.2
15. Laborers, other	0.3	0.5	0.4	0.8	0.5	1.4	1.1	1.1	1.2	1.7
16. Farmers	0.4	0.4	0.5	0.4	0.9	0.7	0.7	0.8	1.2	1.5
17. Farm laborers	0.1	0.2	0.4	0.2	0.6	0.6	0.8	0.9	0.9	1.4

<sup>a</sup> Rounds to unity from above (other indices shown as 1.0 round to unity from below).

Source: Blau & Duncan, Ref. 1.

had also been in manufacturing labor. This means that 3.3 times as many respondents in manufacturing labor had fathers in manufacturing labor than would have happened if the son's choice of occupation had been independent of the father's occupation. The immobility ratios in Table 1.5 [Ref. 4: p. 32] are the mobility ratios for the same father-son occupation.

The amount of occupational inheritance varies among the different civilian occupational classes. Blair and Duncan [Ref. 4: p. 41] and Caplow [Ref. 2: p. 77] agree that the extent of occupational inheritance depends on the amounts of self-employment, the individual's proprietarial interest in the occupation, and physical instruments used in the occupation. Occupations containing these elements include independent professionals, proprietors, and farmers. This corresponds with the findings of Featherman and Hauser [Ref. 1: p. 217] that occupational inheritance is "greatest at the extremes of the occupational hierarchy -- in the upper nonmanual stratum and in the farm stratum." In examining inheritance of specific occupations, Caplow [Ref. 2: pp. 76 & 215] found that farming was most frequently inherited. In common with other frequently inherited occupations, farming involves the inheritance of property (capital investment), childhood training, and either isolation or immersion in a well-defined local culture. The military as an occupation exhibits both the characteristics of isolation and a well-defined culture.

There is some disagreement whether the role of occupational inheritance is increasing or decreasing. Of crucial importance when examining changes in occupational inheritance and mobility is the determination of

TABLE 1.5  
 Immobility Ratios\* in 12-by-12 Occupational  
 Mobility Classifications

Occupation Category	Father's Occupa- tion to son's First Occupation	Father's Occupa- tion to son's Current Occupation
Professionals, Self-employed	20.55	19.56
Professionals, Salaried	2.96	3.02
Managers	3.28	2.89
Proprietors	10.53	3.25
Sales Workers	1.89	2.34
Clerical Workers	1.15	1.07
Craftsmen, Foremen and Kindred Workers	0.67	0.59
Operatives	1.24	1.04
Service Workers	2.74	2.26
Laborers, Excluding Farm and Mine	1.99	1.82
Farmers and Farm Managers	24.75	20.69
Farm Laborers and Foremen	25.24	17.71

\*An immobility ration of 1 indicates sons of fathers in that occupation are no more likely than other sons to choose the occupation. Sons of Sales Workers, for example, are 1.89 times more likely than sons of fathers with a different occupation to choose sales work as their first occupation.

Source: Blau & Duncan, Ref. 4.

which changes are due to changes in occupational structure, and which are changes in the real rates of occupational inheritance.

Featherman and Hauser [Ref. 1: p. 217] and Caplow [Ref. 2: p. 79] recognize the influence of the demographic, educational, and economic forces which affect changes in the occupational structure which affects intergenerational mobility trends. Featherman and Hauser [Ref. 1: p. 135] see a trend toward increased occupational mobility. This idea is not supported by all researchers. Even the same research team, Hauser, Koffel, Travis, and Dickinson, using the same data, the 1962 OCG, reached different conclusions in different articles. First, [Ref. 5: p. 295] they found that, "once trends in the occupational structures are controlled, there are no trends in the occupational mobility of U.S. men." Later that same year, [Ref. 6: p. 597] however, they found that "intergenerational mobility appears to have increased and downward mobility to have decreased over time."

As explained by Caplow [Ref. 2: p. 216], in his study of inheritance of occupational level, possible occupational choices are determined by the circumstances of upbringing, whereas in inheritance of specific occupation, the parent's occupation determines the child's occupation. In looking at specific occupational inheritance, no evidence has been found to indicate changes in specific occupational inheritance rates over time. [Ref. 5: p. 288]

#### B. INTEGENERATIONAL OCCUPATIONAL INHERITANCE IN THE MILITARY

Studies of occupational inheritance in the military have, with the exceptions of Moskos [Ref. 8] and Sharp and Biderman [Ref. 9], focused upon military leaders and executives [Ref. 10, 11], officers [Ref. 12],

or military cadets. [Ref. 13, 10] The results of these studies are summarized in Table 1.6. The highest percentages of sons with military fathers are found among military academy cadets and Regular Army junior officers (primarily academy graduates).

In general, there seems to be agreement that occupational inheritance in the military is greater than in most equivalent civilian occupations [Ref. 14: p. 270, Ref. 15: p. 37]. Explanations for this inheritance are based upon geographical and social isolation, and family tradition. [Ref. 15, p. 37] As noted by Caplow, [Ref. 2: p. 215] "A moderate probability of occupational inheritance may be sufficient to establish rather strong expectations on the part of the family and the community." In the United States, occupational continuity of two generations may be sufficient to establish a tradition of some weight. The importance of these family traditions increase with reductions in the size of the military and in its attractiveness for the general population. [Ref. 15: p. 38] It is these types of traditions that lead to the large proportions of children of military officers in the military academies, and in these children's early choice of the military as a career. Among the West Point Cadets in the early sixties, 63 percent of cadets with military fathers seriously considered a military career, compared to only 44 percent of cadets whose fathers pursued non-military occupations. [Ref. 13: p. 37]

Preferential admissions to the sons of military officers enhance the tendency towards self-recruitment that is present in all professions. [Ref. 15: p. 36] There have also been increases in the numbers of children of non-commissioned officers at the military academies.

TABLE 1.6  
Studies of Intergenerational Succession in the  
U.S. Military

Time	Survey Population	Percent With Military Fathers	Fathers	Reference
1910	Military leadership	7	Officers	10
1920	Military leadership	10	Officers	10
1935	Military leadership	23	Officers	10
1950	Military leadership	11	Officers	10
1950	Navy leadership	11	Professional soldier	10
1950	Air Force leadership	5	Professional soldier	10
1959	Military executives	10	Uniformed service at son's service entry	11
1964	Officers retired in 1964	2	Military--major or longest held occupation	9
1964	Enlisted retired in 1964	2	Military--major or longest held occupation	9
1964	Army officers	5	Military when subject was 15	8
1964	Navy officers	4	Military when subject was 15	8
1964	Air Force officers	2	Military when subject was 15	8
1964	Marine Corps officers	3	Military when subject was 15	8
1964	Army enlisted	2	Military when subject was 15	8
1964	Navy enlisted	2	Military when subject was 15	8
1964	Air Force enlisted	2	Military when subject was 15	8
1964	Marine Corps enlisted	2	Military when subject was 15	8
1973	Regular Army junior officers	23	15 years military experience	12
1973	Active duty reserve Army junior officers	17	15 years military experience	12
1962	Military Academy second year	8	West Point officers	13
1962	Military Academy second year	12	Non-West Point officer	13
1962	Military Academy second year	2	Enlisted man	13
1962	Military Academy second year	22	All military	13

TABLE 1.6 (continued)

Time	Survey Population	Percent With Military Fathers	Fathers	Reference
1945- 1960	Military Academy entering class	16 (minimum 1948)	Professional military	13
1945- 1960	Military Academy entering class	25 (maximum 1949)	Professional military	13
1945- 1960	Military Academy entering class	22 (median)	Professional military	13
1945- 1960	West Point Class of 1960	25	Officers	10

[Ref. 16: p. 124] Lovell [Ref. 13: p. 136] found that 25 percent of the West Point class of 1965 had fathers who were, or had been, enlisted men, compared to 36 percent whose fathers had been military officers.

Despite obvious self-recruitment, Lang [Ref. 15: p. 34] still found that officers of all ranks are "somewhat more representative of the general population" now than they once were. He attributes this, at least in part, to the large numbers of men in the population who served in the military during the large scale wars of the recent past. Changes in the rates of military service participation of parents are also considered by Biderman and Haley. [Ref. 17: p. 37] They found that during the parent generation's military service, the military force was about one-third larger than now.

#### C. OCCUPATIONAL DECISIONS

Occupational decisions are based upon the information that is available to the decisionmaker. As pointed out by Shartle, [Ref. 18: p. 62] and Taylor, [Ref. 3: p. 62] due to the increasing number of occupations in an urbanized society, fragmentary evidence is all that is available upon which to base occupational decisions. It is limitation of knowledge and opportunity that leads to choices of occupation similar or close in occupational category to that of their parents.

Hughes, [Ref. 19: p. 233] Blau and Duncan, [Ref. 4: p. 295] Lang, [Ref. 15: p. 39] Dunkerly, [Ref. 7: p. 15] and Shartle [Ref. 18: p. 2] all emphasize the effects of the family upon occupational choices. Influences come from the socioeconomic level of the family and resulting socialization, and from the education level of the parents. Education has been found [Ref. 2: p. 79] to be the principal channel of upward

mobility. Since education level of parents affect their children's occupational choices, the educational benefits of the G.I. Bill are still influencing occupational choices being made today by children of the original service members eligible for its benefits.

Glickman [Ref. 20: p. 168] studied occupational choices made about the Navy, and found that peers and parents play a major role among the different factors that influence a man's decision to enlist in the Navy. Additionally, ambiguities and uncertainties about Navy opportunities and training were found to decrease the likelihood that the Navy will be actively considered as a viable career. Thus, the individual whose parent had military service and who therefore has greater direct or indirect knowledge of military service, will be more likely to consider and choose the military as a career.

#### D. SOCIALIZATION AND ASSIMILATION

Karsten [Ref. 21: p. 28] asserts that individuals in the military having a positive attitude toward the military were more likely to be promoted and to reenlist. This includes not only attitudes toward military tasks, but also toward the military as an employer providing an adequate and respectable level of personal security. [Ref. 22: p. 67] In view of the low rankings given by American teenagers to the military as an occupation, particularly as an enlisted career, [Ref. 12: p. 93, Ref. 3: pp. 172-173] positive views about the military by parents would be very important in influencing an individual to consider a military career. For many parents, years in the military were the most interesting of their lives, and left them with a positive attitude toward the military. [Ref. 21: p. 35]

Janowitz [Ref. 22: p. 66] also stresses the importance of strong positive motives in assimilating the "elaborate code" which regulates military behavior. Children of military personnel are already at least partially socialized to the military when they enter. Janowitz further asserts [Ref. 22: p. 49] that it is doubtful whether the military could operate without this preliminary socialization and strong occupational inheritance. Such influences last beyond the initial service period. Among officers' sons who graduated from West Point between 1938 and 1954, only one out of twelve had resigned by 1958, compared with one out of six among those from civilian urban middle class groups.

## II. METHODOLOGY

This thesis will examine two major areas in relation to the behavior of personnel whose parents had military service, i.e., "juniors."

The main area of research involves differences in military behavior and socioeconomic characteristics between juniors, and those whose parents had no military experience, i.e., "nonjuniors." The second area of research examines whether juniors are represented in the military in similar proportions to their composition in the population at large.

### A. INTERGENERATIONAL MILITARY BEHAVIORAL AND SOCIOECONOMIC CHARACTERISTICS

The intergenerational relationships to be examined can be categorized into three areas: (a) general descriptive and behavioral information, (b) satisfaction with and perceptions of military life, and (c) career and reenlistment intentions.

To test hypotheses related to differences among juniors and non-juniors, analysis will be done on data from the 1978 DOD Survey of Officers and Enlisted Personnel. Data used are from Forms 2 and 4 of the survey. The separately administered Forms 1 and 3 contain no questions on military experience of parents, and could not be used for this study. Forms 2 and 4 contain questions dealing with specific personnel policies, such as rotation experience, promotions, reenlistment, and the military's utilization of women. Form 2 is for enlisted personnel. Form 4 is for officers. Analysis of data for officers and enlisted personnel will be conducted separately.

Contained in both Form 2 and Form 4 of the survey are questions that address the military experience of family members. Responses to these questions will be used to construct a variable measuring the military service of parents. Respondents are categorized as nonjuniors (parents had no military service) or juniors (parents had military service).

When the underlying variable of interest is continuous (e.g., entry age) or has sufficient properties of continuity (e.g., 7 point attitude scale), a test of differences between means will be used to decide if behavior or attributes are different for juniors versus nonjuniors. A type I error probability of .05 will be utilized for the means test. When the underlying variable is not conducive to a means test and has a categorical distribution, the procedure will be to apply a chi square test of independence to determine if differences between service members grouped by their junior status are statistically significant. For example, tests will be used to determine whether or not junior and nonjunior officers have different sources of commission.

Due to the over-sampling of women and blacks in the survey, results from these groups will be analyzed separately. An additional grouping by term of service will allow the consideration of differences that are due more to time in service than to the differential military experience of parents. Since entry into the military occurs primarily in a very narrow age range, and promotion occurs at length of service points, the term of service groupings also will reflect differences due to rank, age, and career status.

The specific intergenerational effects to be examined are as follows:

1. General Socioeconomic Information

- a. Entry age,
- b. Level of father's education,
- c. Marital status on entry,
- d. Level of respondent's education,
- e. Current paygrade attained,
- f. Proportion still in first primary specialty, and
- g. Method of commissioning for officers.

2. Satisfaction With and Perceptions of Military

- a. Attitude toward military life and current location,
- b. Problems at current location,
- c. Problems on permanent change of station (PCS) moves,
- d. Perceptions of morale at current location, and
- e. Perception of readiness to perform combat missions.

3. Career and Reenlistment Intentions

- a. Anticipated length of service and paygrade on completion of services. These differences may narrow in the longer length of service groups since senior people have already made a number of career decisions to remain in the military.
- b. Civilian pay expectations, and
- c. Intentions to reenlist.

It is expected that juniors will differ from nonjuniors in a number of socioeconomic areas. An earlier interest in military service by juniors should be reflected in an earlier age on entry and in higher proportions of juniors receiving commissions from the Naval Academy or

ROTC programs. An earlier age on entry should also be reflected in a lesser proportion of juniors who were or had been married when they entered the service. Fathers' education should be higher for juniors due to the effects of the GI Bill, and it may have influenced the juniors' level of education.

A higher paygrade is anticipated for juniors, though the paygrade may not differ due to the term of service categorizations. A greater knowledge of the service and its jobs should be reflected in a more informed initial choice of specialty and, therefore, fewer juniors who have been involuntarily changed to a different specialty.

It is anticipated that juniors will have a more positive perception of the military and be more satisfied with it. They should perceive fewer problems than nonjuniors, and due to experience possibly gained during parents' PCS moves, should have fewer problems on their own PCS moves.

Juniors are expected to be more likely than nonjuniors to intend to remain in the military for a career. This would be reflected in greater length of service and paygrade expectations for juniors, and in greater intention to reenlistment among enlisted juniors. Less realistic information about civilian opportunities among juniors may be reflected by less expectations of what they could earn in a civilian job.

The socioeconomic differences between juniors and nonjuniors should be reflected in all three term of service groups. Age of entry, for example, does not change with length of service. It is expected, however, that there will be fewer differences between juniors and nonjuniors in the second or third term groups in those areas, such as attitudes

and career intentions, where military socialization and experience will tend to reduce the impact of parents' experience due to the increased experience of the respondent.

#### B. INTERGENERATIONAL OCCUPATIONAL CHOICE

The proportions of juniors in the age-relevant population at large must be determined to be able to test hypothesis concerning whether military participation rates of juniors are different from the participation rates of nonjuniors. The estimates of the relative proportions of military juniors established by Biderman and Haley [Ref. 17] will be used as the best available estimates. Due to the focus of their study on career military personnel, the rates of participation this study will focus on males whose fathers had 10 or more years of military service. Due to the over-sampling of blacks in the survey, their participation rates will be looked at separately.

Using a variable for years of parents' military service, it will be possible to determine the relative proportion of juniors, or a juniors' participation rate in the Navy, by dividing the number of juniors in each group by the number of respondents in that group. Due to the over-sampling of blacks, this group will again be looked at separately. Participation rates for women will be developed based upon an assumption that they have essentially the same proportions of juniors and nonjuniors as the male population.

An immobility ratio will be developed by dividing the junior's Navy participation rate by the proportion of juniors in the national population as estimated by Biderman and Haley. This immobility ratio is, in effect, how much more likely juniors are than nonjuniors to enter

the Navy than they would be if juniors and nonjuniors entered in proportion to their share in the national population, i.e., if there was no intergenerational occupational inheritance.

### III. MILITARY AND SOCIOECONOMIC CHARACTERISTICS OF JUNIORS

Due to differences in personnel policies for officer and enlisted personnel, officer and enlisted respondents were analyzed separately. Additionally, due to the over-sampling of females and blacks, officer and enlisted respondents were each partitioned into three subgroups for analysis: non-black males, black males, and females.

#### A. PREVALENCE OF JUNIORS

All six groups were examined to determine whether or not their parents had military service. The distribution of parents' military experience is shown in Table 3.1. The percentage of juniors varies from 60.8 percent for black male enlisted to 82.7 percent for female enlisted. The lower percentage of juniors in both enlisted and officer blacks is probably due to military policies and low education for the parent generation which limited parents' participation in the military. The high percentage of female juniors probably reflects a greater propensity to enlist by females who have had exposure to information on what might be considered a very nontraditional job choice for a woman.

The black male officer sample contained only 20 respondents. Therefore, it will be omitted from separate statistical analysis. The other five groups were analyzed in regard to a number of behavioral and socio-economic variables to determine if juniors and nonjuniors differed in regard to: (a) socioeconomic characteristics, (b) satisfaction with and perceptions of military life, and (c) career and reenlistment intentions. Generally, either a means test or a chi square test was used to decide

TABLE 3.1  
Military Experience of Parents

Group	Nonjunior (Percent)	Junior (Percent)
<b>Enlisted</b>		
Non-black males	758 (26.7)	2079 (73.3)
Black males	236 (39.2)	366 (60.8)
Females	98 (17.3)	468 (82.7)
<b>Officers</b>		
Non-black males	549 (30.1)	1276 (69.9)
Black males	7 (35.0)	13 (65.0)
Females	103 (20.5)	400 (79.5)

whether a significant relationship exists between variables representing these categories and being a junior. A test statistic having a probability of type I error of .05 or lower will be considered statistically significant.

The prevalence of juniors in different career length categories was examined. For enlisted personnel, the categories were enlistment periods: first enlistment, second enlistment, and third or more enlistment. A similar categorization was not available for officers, so length of service (LOS) was used instead: less than four years, six to ten years, and ten or more years. Officers in the four to six year LOS period were not included. Since initial obligated service varied from four to six years, these officers could not be clearly categorized as first term or as those who had made a decision to stay past their initial obligation of service. In almost all cases, results of this enlistment period and LOS analysis closely agree with alternative measures of length of career status such as paygrade.

The prevalence of juniors in the different career categories and groups are shown in Table 3.2. The female juniors show overall the highest percentages, and the black males the lowest due to the factors discussed in regard to Table 3.1. The higher junior percentages among first and second term personnel probably reflect the greater military participation of their parents' generation when compared with those in their third term or more.

Due to the nonhomogeneous nature of other factors affecting career status, such as age, paygrade, broken service, and education, caution should be used in interpreting these cross-sectional results as being

TABLE 3.2  
Military Experience of Parents by Career Status

Group	Nonjunior (Percent)	Junior (Percent)
<b>First Term</b>		
<b>Enlisted</b>		
Non-black males	210 (21.6)	760 (78.4)
Black males	112 (38.2)	181 (61.8)
Females	75 (17.8)	346 (82.2)
<b>Officers</b>		
Non-black males	66 (19.6)	271 (80.4)
Females	38 (16.6)	191 (83.4)
<b>Second Term</b>		
<b>Enlisted</b>		
Non-black males	188 (23.3)	620 (76.7)
Black males	54 (33.1)	109 (66.9)
Females	15 (13.5)	96 (86.5)
<b>Officers</b>		
Non-black males	52 (17.6)	244 (82.4)
Females	17 (20.0)	69 (80.2)
<b>Third Term or More</b>		
<b>Enlisted</b>		
Non-black males	357 (33.9)	697 (66.1)
Black males	68 (47.2)	76 (52.8)
Females	8 (23.5)	26 (76.5)
<b>Officers</b>		
Non-black males	408 (40.9)	589 (59.1)
Females	31 (36.9)	53 (63.1)

indicative of differential career progression of juniors. These other factors will be more directly addressed in the analysis of other variables. It is particularly important to remember that proportions of juniors in the general population vary due to varied military participation rates of their parents' generations. Therefore, further analysis will be separately undertaken for each career category in regard to:

- (a) socioeconomic characteristics, (b) satisfaction with military, and
- (c) career intentions.

## B. RESULTS OF DATA ANALYSIS

### 1. First Term

The results of the analysis of the first term groups are summarized in Tables 3.3, 3.4, and 3.5, and are presented in detail in Appendix A.

#### a. General Socioeconomic Evidence (Table 3.3)

The earlier age at service entry for juniors in 58 percent of the enlisted population and for both of the officer groups demonstrate that juniors have an earlier interest in the service than nonjuniors. The earlier age for juniors at entry, as expected, explains the smaller percentages of junior officers who had been divorced or separated prior to entering the service.

The higher fathers' education exhibited by juniors is most likely explained by the GI Bill and by service selection procedures in the fathers' generation. The fathers' education is most important due to the effect it has upon children's occupational choice (see I.C above).

An early service interest is also demonstrated by the higher proportions of junior officers who enter through the Naval Academy and

Table 3.3  
 Statistically Significant Results in Socioeconomic  
 Information for First Term Groups

Variable	Non-black Male Enlisted	Black Male Enlisted	Female Enlisted	Non-black Male Officer	Female Officer
Entry Age	-			-	-
Fathers' Education	+		+	+	+
Marital Status at Entry				-	-
Current Education		+		-	-
Commission Source				+	
Paygrade				-	+
Change in Specialty					

Note: + indicates juniors had higher mean or proportion.  
 - indicates nonjuniors had higher mean or proportion.

ROTC programs. Both this higher proportion of Academy graduates and earlier entry age for juniors served to show juniors with a lower pay-grade among non-black male officers.

Knowledge obtained either directly or indirectly from parental military service did not apparently aid juniors in choosing specialties as had been expected, as there were no statistically significant differences between juniors and nonjuniors in voluntary reclassification of speciality.

Overall, the data tend to support a hypothesis that there is a tendency toward occupational inheritance in the military, particularly in the early entry age of juniors and in their higher proportions in ROTC programs.

b. Satisfaction With and Perceptions of the Military (Table 3.4)

Since juniors and nonjuniors enter the service with different information about military life, it was expected that they would have differing perceptions of the military, particularly during the first term when their own military experience may not outweigh parental experience.

Only the female officer group shows statistically significant differences between juniors and nonjuniors in regard to satisfaction, and these results do not show a consistently more positive view by either juniors or nonjuniors. The female juniors show more satisfaction with the military as a way of life, and less satisfaction with their current location.

In regard to perception of problems at their current location, juniors and nonjuniors differed in the non-black male enlisted groups, the majority of the enlisted population, where more juniors perceived

alcohol to be a problem. It is unclear as to whether this difference is due to (a) a more accurate assessment of the problem by juniors or nonjuniors, (b) differing perceptions of alcohol as a problem, or (c) whether juniors have a less positive attitude.

In regard to problems on PCS moves, as expected, juniors did have fewer problems in those areas where differences existed between juniors and nonjuniors, but these differences existed only in the officer groups in six out of ten areas.

In regard to differences in perceptions of morale and performance abilities, juniors and nonjuniors again do not exhibit consistently different perceptions.

Overall, juniors and nonjuniors do not appear to differ in their attitudes toward the military and problems within the military. Parental military experience did appear to lessen officer juniors' problems in some PCS areas.

### c. Career and Reenlistment Intentions (Table 3.5)

Results of analysis of career and reenlistment expectations should show juniors expecting a longer career if occupational inheritance continues past initial entry. This expectation is not met. Instead, in the only two groups to exhibit a difference between juniors and nonjuniors, it is the nonjuniors who have the greater paygrade expectations. Reasons for the greater paygrade expectations of nonjuniors are unclear, but they may be related to the non-black male enlisted non-juniors' higher morale, and to the female officer nonjuniors' greater satisfaction with their current locations.

Table 3.4  
 Statistically Significant Results in Satisfaction  
 With and Perception of Military for First Term Groups

Variable	Non-black Male Enlisted	Black Male Enlisted	Female Enlisted	Non-black Male Officer	Female Officer
Current Location					-
Military as Way of Life					+
Problems at Current Location					
a. Drug Use					
b. Racial Tension					
c. Crime					
d. Alcohol Use		+			
Problems on PCS Move					
a. Adjustment to Higher Cost of Living					-
b. Moving and Setting up					-
c. Unreimbursed Moving Expenses					-
d. Off-Duty Employment					-
e. Spouse's Employment					-
f. Continuing Education					-
g. Permanent Housing					-
h. Shopping and Recreation Facilities					-
i. Children's Adjustment					-
j. Spouse's Adjustment					-
k. Own Adjustment					-
Morale at Current Location					
Personnel's Performance					
Equipment's Performance					

Note: + indicates juniors had higher mean or proportion.  
 - indicates nonjuniors had higher mean or proportion.

Table 3.5  
 Statistically Significant Results in Career and  
 Reenlistment Intentions for First Term Groups

Variable	Non-black Male Enlisted	Black Male Enlisted	Female Enlisted	Non-black Male Officer	Female Officer
Years of Service Expected					
Paygrade Expected		-			-
Reenlist With No Bonus					
Reenlist for Training					
Civilian Earning Expectations					

Note: + indicates juniors had higher mean or proportion.  
 - indicates nonjuniors had higher mean or proportion.

d. Summary for First Term Groups

Juniors appear to have shown an earlier interest in the service than nonjuniors, but once in the service, their assessments of the Navy and their career intentions do not substantially differ.

2. Second Term

Tables 3.6, 3.7, and 3.8 present summaries of analyses for second term groups. Analyses are presented in detail in Appendix B.

a. General Socioeconomic Information (Table 3.6)

As with the first term groups, second term juniors show earlier age of entry, indicating an earlier interest in the military. Fathers' education is again greater for juniors than for nonjuniors. Black juniors' education is also higher, again probably as the result of the effects of the military as a "bridging environment" upon their fathers. Other socioeconomic differences, such as those in paygrade, appear to be the result of the differences between juniors and nonjuniors in regard to entry age and education.

b. Satisfaction With and Perceptions of the Military (Table 3.7)

As expected, there are fewer differences between juniors and nonjuniors in regard to attitudes toward the Navy and problems.

c. Career and Reenlistment Intentions (Table 3.8)

Juniors do not have opinions on career intentions substantially different from nonjuniors, and those differences that do exist appear to be the result of the differences in the socioeconomic characteristics of juniors and nonjuniors.

Table 3.6  
 Statistically Significant Results in General  
 Socioeconomic Information for Second Term Groups

Variable	Non-black Male Enlisted	Black Male Enlisted	Female Enlisted	Non-black Male Officer	Female Officer
Entry Age	-			-	-
Fathers' Education	+	+		+	
Marital Status at Entry					
Current Education		+		-	
Commission Source					
Paygrade		+	-		-
Change in Specialty					

Note: + indicates juniors had higher mean or proportion.  
 - indicates nonjuniors had higher mean or proportion.

Table 3.7

Statistically Significant Results in Satisfaction  
With and Perception of the Military for Second Term Groups

Variable	Non-black	Black	Non-black		
	Male Enlisted	Male Enlisted	Female Enlisted	Male Officer	Female Officer
Current Location	-				
Military as Way of Life	-	-			
Problems at Current Location					
a. Drug Use					
b. Racial Tension					
c. Crime					
d. Alcohol Use	+				
Problems on PCS Move					
a. Adjustment to Higher Cost of Living					
b. Moving and Setting up					
c. Unreimbursed Moving Expenses					
d. Off-Duty Employment					
e. Spouse's Employment					
f. Continuing Education					
g. Permanent Housing					
h. Shopping and Recreation facilities					
i. Children's Adjustment					
j. Spouse's Adjustment					
k. Own Adjustment					
Morale at Current Location					
Personnel's Performance					
Equipment's Performance					

Note: + indicates juniors had higher mean or proportion.  
- indicates nonjuniors had higher mean or proportion.

Table 3.8  
 Statistically Significant Results in Career and  
 Reenlistment Intentions for Second Term Groups

Variable	Non-black Male Enlisted	Black Male Enlisted	Female Enlisted	Non-black Male Officer	Female Officer
Years of Service Expected					
Paygrade Expected					
Reenlist With No Bonus					
Reenlist for Training					
Civilian Earning Expectations	-				

Note: + indicates juniors had higher mean or proportion.  
 - indicates nonjuniors had higher mean or proportion.

### 3. Third Term

The results and analysis of third term groups (Tables 3.9, 3.10, and 3.11), show the same basic differences for juniors and non-juniors as exist for the first and second term groups. Detailed analyses for third term groups are presented in Appendix C.

#### a. General Socioeconomic Information (Table 3.9)

Juniors show earlier military interest as indicated by the earlier entry ages for juniors and higher proportions of juniors who are Academy graduates.

#### b. Satisfaction With and Perceptions of the Military (Table 3.10)

The third term group did exhibit more differences between juniors' and nonjuniors' perceptions of the military than the second term groups, but they are still less than the first term groups, and once again appear to be primarily the results of differences between juniors and nonjuniors in regard to socioeconomic characteristics.

#### c. Career and Reenlistment Intentions (Table 3.11)

The lower years of service expectations of juniors also appear to be related to the age at entry, education, and commission source differences.

Table 3.9  
 Statistically Significant Results in General  
 Socioeconomic Information for Third Term Groups

Variable	Non-black Male Enlisted	Black Male Enlisted	Female Enlisted	Non-black Male Officer	Female Officer
Entry Age	-	-	-	-	-
Fathers' Education	+	-	-	+	-
Marital Status at Entry	-	-	-	-	-
Current Education	-	-	-	-	-
Commission Source	-	-	-	+	-
Paygrade	-	-	-	-	-
Change in Specialty	-	-	-	-	-

Note: + indicates juniors had higher mean or proportion.  
 - indicates nonjuniors had higher mean or proportion.

Table 3.10

Statistically Significant Results in Satisfaction  
With and Perception of the Military for Third Term Groups

Variable	Non-black Male Enlisted	Black Male Enlisted	Female Enlisted	Non-black Male Officer	Female Officer
Current Location					+
Military as Way of Life					-
Problems at Current Location					
a. Drug Use					
b. Racial Tension					
c. Crime					
d. Alcohol Use					
Problems on PCS Move					+
a. Adjustment to Higher Cost of Living					
b. Moving and Setting up					
c. Unreimbursed Moving Expenses					
d. Off-Duty Employment					
e. Spouse's Employment					
f. Continuing Education					+
g. Permanent Housing					
h. Shopping and Recreation facilities					
i. Children's Adjustment					
j. Spouse's Adjustment					
k. Own Adjustment					
Morale at Current Location		-			
Personnel's Performance				-	
Equipment's Performance				-	

Note: + indicates juniors had higher mean or proportion.  
- indicates nonjuniors had higher mean or proportion.

Table 3.11  
 Statistically Significant Results in Career and  
 Reenlistment Intentions for Third Term Groups

Variable	Non-black Male Enlisted	Black Male Enlisted	Female Enlisted	Non-black Male Officer	Female Officer
Years of Service Expected					
Paygrade Expected					
Reenlist With No Bonus					
Reenlist for Training					
Civilian Earning Expectations		-			

Note: + indicates juniors had higher mean or proportion.  
 - indicates nonjuniors had higher mean or proportion.

## VI. NAVY PARTICIPATION RATES

### A. PROPORTIONS OF JUNIORS IN THE NATIONAL POPULATION

In their exploratory study of intergenerational succession in the Navy, [Ref. 17] Biderman and Haley estimated the percentages of the children of personnel with ten or more years of service, i.e., career juniors, in their total population cohort. Their estimates address males only, but it may be anticipated that female distributions approximate that of the male population. Their estimates are shown in Figure 1.

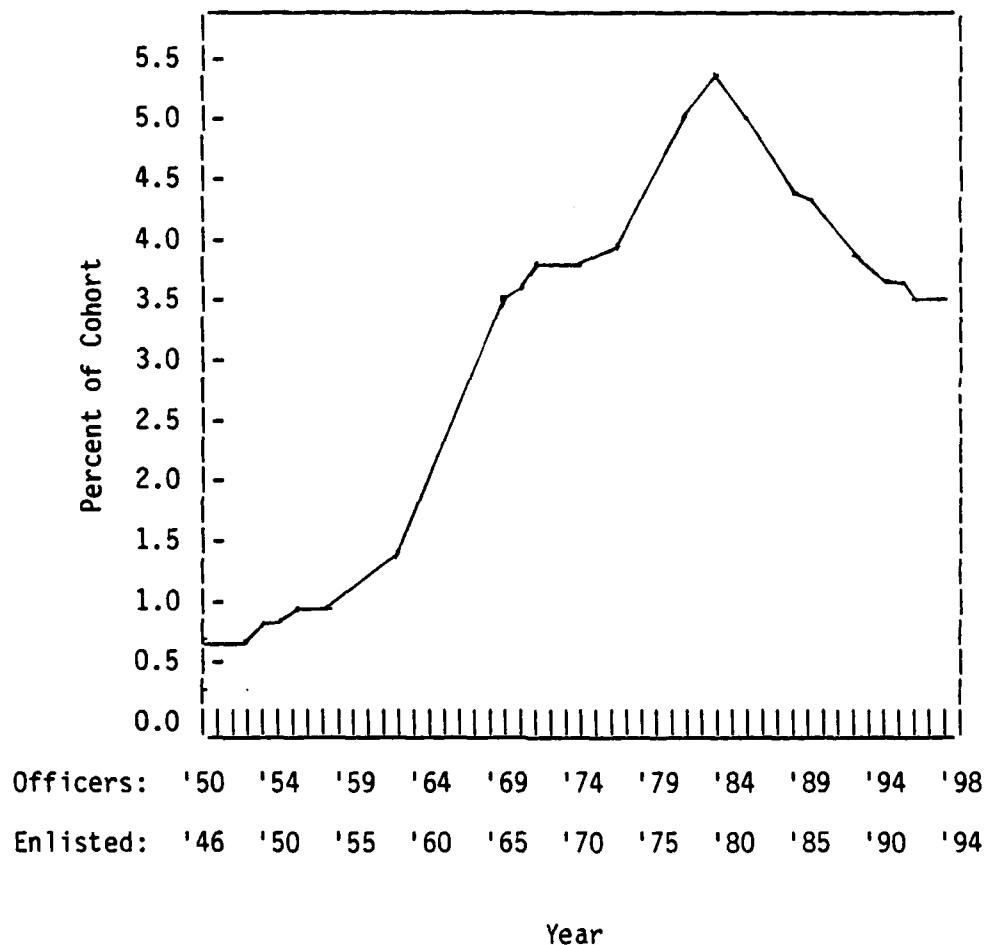
### B. PROPORTIONS OF JUNIORS IN THE SURVEYED POPULATION

Since differences in proportions of juniors in the second and third term groups are affected by reenlistment behavior as well as enlistment and attrition behaviors, only first term groups will be examined to see if juniors enter the Navy in greater proportions than nonjuniors. Since the study by Biderman and Haley [Ref. 17] focused on children of career military personnel, juniors will be classified as "career" juniors, i.e., parent had ten or more years of military service, and "other" juniors, i.e., parent had zero to 10 years of military service. The percentages of career juniors in the surveyed groups are compared to the proportions of career juniors in the national population as estimated by Biderman and Haley (Figure 1) to determine if career juniors are disproportionately represented in entrants to the Navy. Results of these comparisons are presented in Table 4.1.

As shown in Table 4.1, career juniors are disproportionately represented among the first term groups with the exception of the black

Figure 1

Estimates of Male Career Juniors as a Percent of the National Population in Assumed Modal Age Span for Service Entry as Officers, 1950-1998, and as Enlisted Persons, 1946-1994



Notes: Ratio of juniors to national population for any year of age is estimated by ratio of the military career population to the national population in the age span 26-33 years older than the juniors. "Military career population" is the combined active duty and retired population in 1976. Male distributions only were used. Horizontal scales assume Age 19 as modal age of entry for enlisted persons and Age 23 for officers.

Source: Biderman and Haley. [Ref. 17]

Table 4.1  
Proportions of Juniors in First Term Groups

Group	Number in Survey	Percentage of Nonjuniors	Percentage of Other Juniors	Percentage of Career Juniors	Average Percentage of Career Juniors in National Pop- ulation for Years When Surveyed	Group Entered	Immo- bility ratio
Non-black Male Enlisted	901	21.5	63.6	14.9	4.6	3.2	
Black Male Enlisted	267	39.3	52.1	8.6	4.6	1.9	
Female Enlisted	405	18.0	63.5	18.5	4.6	4.0	
Non-black Male Officers*	424	18.9	60.6	20.5	4.3	4.8	
Female Officers	228	16.7	62.3	21.1	4.3	4.9	

\*Includes Naval Academy graduates with less than eight years service since four of their years were at the Naval Academy.

male enlisted group, there are at least three times as many career juniors than would be expected if they had enlisted in proportion to their share of the national population. The lower proportions of black male career juniors are still greater than their share of the national population and is probably due to the improved education of blacks, and to poorer opportunities in the civilian job market for black youth.

When the immobility rates from Table 4.1 are compared to those in Table 1.5 for the civilian job market to see how much more likely juniors are to enter their fathers' occupations, the Navy immobility ratios are usually higher than the civilian ratios. The exceptions are those involving farms (ratio greater than 24), ownership of capital equipment (10.53), or self-employed professionals (20.55). It thus appears that there is a greater intergenerational occupational inheritance in the Navy than among most salary or wage earning civilian occupations.

Appendix D contains tables showing the proportions of career juniors and other juniors for each year of service entry in each of the five groups. This information is presented for informational purposes, and should be used with caution. Proportions of juniors in year groups beyond initial periods of service reflect not only the differential entry rates of juniors and nonjuniors, but also reflect any differences in retention behavior between career juniors, other juniors, and nonjuniors.

#### C. COMPARISON WITH EARLIER STUDIES

The percentages of juniors in Table 4.1 are higher than in nearly all other studies (Table 2.7) except those which address officers and Academy groups. The previous studies with percentages of juniors in the low twenties compare favorably with the results of this study, which finds

percentages of 21.6 percent career juniors among Academy graduate first termers. Table 4.2 presents the proportions of juniors for first term non-black male officers broken down by source of commission. Since these previous studies used differing definitions for parents' military status, caution must be used in drawing conclusions from these comparisons.

#### D. CONCLUSION

It is clear that intergenerational occupational inheritance is stronger in the Navy than among many other occupations. Unfortunately, data for the other services, or for DOD as a whole, were not available for analysis in this study. Career juniors enter the Navy in much greater proportions than would be expected based on their proportions in the national population.

Table 4.2  
 Proportions of Juniors in First Term  
 Non-black Male Officers by Commission Source

Commission Source	Number in Survey	Percentage of Nonjuniors	Percentage of Other Juniors	Percentage of Career Juniors	Immobility Ratio
Academy	111	13.5	64.9	21.6	5.0
OCS/RSRVOC	57	17.5	70.2	12.3	2.9
ROTC-REG	25	28.0	56.0	16.0	3.7
ROTC-SCHLRSHP	92	12.0	56.6	31.5	7.3
AVIA OC	44	27.3	50.0	27.7	6.4
DIR APPT	35	37.1	48.6	14.3	3.3
OTHER	59	18.6	67.8	13.6	3.2

## V. CONCLUSIONS AND RECOMMENDATIONS

### A. MILITARY AND SOCIOECONOMIC CHARACTERISTICS OF JUNIORS

Juniors do appear to differ from nonjuniors in a number of socioeconomic characteristics: father's education and those characteristics that result from an earlier age of entry into the service for juniors. Once in the service, there appear to be few differences between the attitudes of juniors and nonjuniors. Those differences that do exist appear to be the result of differences in socioeconomic characteristics, and these differences become fewer in the groups with longer length of service.

### B. NAVY PARTICIPATION OF JUNIORS

Non-black male enlisted career juniors enter the service at rates more than three times the rate that would be expected based upon career junior's proportion in the national population. Black male enlisted enter at nearly twice the rate, and female enlisted and officers at four times or more the rate of their proportion in the population. These rates show a strong tendency of intergenerational occupational inheritance in the Navy.

### C. RECOMMENDATIONS FOR FURTHER RESEARCH

Differences between juniors and nonjuniors in their military participation rates, in their attitudes toward the military, and in their career intentions need further research. Among areas for further research are:

1. Examination of the differences in attitudes and career intentions of career juniors, other juniors and nonjuniors.
2. Research on participation rates of juniors in the other services and in DOD as a whole.
3. More precise determination of the proportions of career juniors in the national population. This should include separate determination of these proportions for black males and for females.
4. Determine reason for juniors' entry in the service, how these are different from the reasons nonjuniors enter, and why juniors enter earlier than nonjuniors.

## APPENDIX A

### FIRST TERM

Enlisted personnel in their first enlistment and officers with less than four years' service are included in this category. These are individuals who made a decision to enter the service, but have yet to make a commitment to a military career.

#### A. SOCIOECONOMIC CHARACTERISTICS

##### 1. Age at Service Entry

Table A.1 presents the results of tests of the relationship between age at entry and parental military experience for first term groups. Statistical tests (t-tests) of the differences in mean age of entry show statistically significant different average entry age between juniors and nonjuniors for the non-black male enlisted, non-black male officers, and female officers. The value in the tables under "Prob." is the type I error probability. The results indicate an earlier entry age for juniors among the majority of the enlisted population and among essentially all of the officer population. The black male enlisted juniors have a younger mean entry age than nonjuniors as well, but the results are not statistically significant. The enlisted female juniors have an older mean age at entry than nonjuniors. This may reflect an initial choice of another job or schooling with the Navy being a later, secondary choice. With the exception of the enlisted female results, the overall results substantiate an earlier interest in the military among juniors than among nonjuniors.

Table A.1  
Age at Service Entry: First Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	208	19.1	2.48	2.64	0.0045
Juniors	755	18.6	1.73		
<b>Black male enlisted</b>					
Nonjuniors	111	19.1	1.82	0.65	0.2595
Juniors	180	19.0	2.16		
<b>Female enlisted</b>					
Nonjuniors	74	19.4	2.82	-1.25	0.107
Juniors	344	19.8	2.88		
<b>Non-black male officers</b>					
Nonjuniors	66	24.2	5.76	1.73	0.044
Juniors	271	22.9	3.20		
<b>Female officers</b>					
Nonjuniors	38	26.6	5.71	3.25	0.001
Juniors	190	23.5	2.53		

## 2. Father's Education

Table A.2 presents the results of tests of the relationship between years of father's education and parental military experience for first term groups. The t-tests of the differences between mean years of father's education show that juniors' fathers' had statistically significantly more years of education for all groups except black male enlisted. The GI Bill educational benefits are the most likely explanation for the juniors' fathers' greater education attainment. It may also reflect the affect on the parent population of the military's use of minimum levels of mental capacity and education as screening criteria. The lack of statistically significant differences for black male enlisted may be due to generally limited educational opportunities available to their parents.

## 3. Marital Status at Service Entry

The relationships between marital status at service entry and parental military experience are presented in Table A.3. For the enlisted groups, the chi square statistics indicate that no statistically significant differences exist between juniors and nonjuniors. For the officer groups, however, the chi square statistics show statistically significantly higher percentages of nonjuniors were divorced or separated for male officers and divorced/separated or were married for female officers. These differences may be explained by the younger ages of juniors at entry that were shown in Table A.1

## 4. Respondent's Years of Education

The results of tests of the relationship between years of education and parental military experience are presented in Table A.4. The t-tests of the differences in mean years of education show statistically

Table A.2  
Years of Father's Education: First Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	188	11.6	3.54	-2.35	0.010
Juniors	686	12.3	3.07		
<b>Black male enlisted</b>					
Nonjuniors	87	11.0	3.33	-1.65	0.051
Juniors	149	11.7	3.10		
<b>Female enlisted</b>					
Nonjuniors	64	11.8	2.50	-2.22	0.0145
Juniors	311	12.5	2.94		
<b>Non-black male officers</b>					
Nonjuniors	60	13.7	3.78	-2.49	0.0075
Juniors	258	14.9	2.90		
<b>Female officers</b>					
Nonjuniors	37	12.6	3.91	-2.46	0.0085
Juniors	172	14.3	3.28		

Table A.3  
Marital Status at Service Entry: First Termers

Group Size	Marital Status at Service Entry		
	Married	Divorced/ Separated/ Widowed	Single/ Never Married
Non-black male enlisted			
Nonjuniors (210)	16 7.6	4 1.9	190 90.5
Juniors (759)	45 5.9	11 1.4	703 92.6
	$\chi^2 = 1.04909$ $p = 0.5918$		
Black male enlisted			
Nonjuniors (111)	7 6.3	0 0.0	104 93.7
Juniors (168)	9 5.0	3 1.7	168 93.3
	$\chi^2 = 2.06404$ $p = 0.3563$		
Female enlisted			
Nonjuniors ( 75)	2 2.7	3 4.0	70 93.3
Juniors (345)	10 2.9	30 8.7	305 88.4
	$\chi^2 = 1.90798$ $p = 0.3852$		
Non-Black male officers			
Nonjuniors ( 64)		9 14.1	55 85.9
Juniors (266)		3 1.1	263 98.9
	$\chi^2 = 21.07780$ $p = 0.0000$		
Female officers			
Nonjuniors ( 37)	4 10.8	6 16.2	27 73.0
Juniors (187)	6 3.2	8 4.3	173 92.5
	$\chi^2 = 12.36322$ $p = 0.0021$		

Table A.4  
Years of Education: First Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	210	12.4	1.28	1.57	0.1085
Juniors	760	12.3	0.88		
<b>Black male enlisted</b>					
Nonjuniors	111	12.2	0.93	-2.58	0.005
Juniors	180	12.5	1.09		
<b>Female enlisted</b>					
Nonjuniors	74	12.7	0.95	0.64	0.261
Juniors	345	12.6	1.15		
<b>Non-black male officers</b>					
Nonjuniors	66	17.4	1.80	2.12	0.0185
Juniors	269	16.9	1.55		
<b>Female officers</b>					
Nonjuniors	38	17.3	1.86	2.31	0.0125
Juniors	189	16.6	1.49		

significantly greater years of education for black male enlisted juniors than for black nonjuniors. This may be due to improvements in fathers' education and job opportunities made possible by the "bridging environment" provided to juniors' fathers by military service. [Ref. 23] The statistically significantly fewer years of education among juniors in the two officer groups may be due to their earlier ages at service entry than nonjuniors (see Table A.1 above).

#### 5. Commission Source

Table A.5 presents the relationship between source of commission and parental military experience for the two officer groups. A chi square statistic indicating a statistically significant relationship is shown for the non-black males. The results indicate a higher proportion of juniors from the academy and ROTC scholarship sources. These higher proportions may be due not only to a greater and earlier interest in military service of juniors, but also to preferential admissions given to juniors. Since this survey was conducted prior to the graduation of females from the Academy, the lack of significant relationship for females may not characterize the relationship for females entering service today.

#### 6. Current Paygrade

Table A.6 presents the results of t-tests of the differences in mean paygrade between juniors and nonjuniors. The t-test results indicate that there are statistically lower paygrades among non-black male officer juniors than among nonjuniors. This might be explained by two factors: 1) Time spent at the Naval Academy is counted as active duty,

Table A.5  
Commissioning Source: First Termers

Group	Commission Source						
	Academy	OCS/ RSRV	OC	ROTC REG.	ROTC SCHLRSHIP	AVIA OC	DIR APPT
<b>Non-black male</b>							
Nonjuniors (n) ( 65)	1 1.5	10 15.4		7 10.8	11 16.9	12 18.5	13 20.2
Juniors (n) (271)	19 7.0	48 17.7		18 6.6	83 30.6	33 12.2	22 8.1
							16.9 17.7
							$\chi^2 = 16.19179$ p = 0.0128
<b>Female officers</b>							
Nonjuniors (n) ( 38)		8 21.1		1 2.6	1 2.6	17 44.7	11 28.9
Juniors (n) (192)		70 36.6		8 4.2	10 5.2	78 40.8	23 13.1
							$\chi^2 = 9.05616$ p = 0.0597

Note: Since enlisted personnel do not receive a commission, no statistics are available for enlisted personnel.

Table A.6  
Current Paygrade: \* First Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	209	4.1	1.09	0.19	0.430
Juniors	758	4.0	0.97		
<b>Black male enlisted</b>					
Nonjuniors	111	3.3	0.92	-1.08	0.141
Juniors	181	3.4	0.91		
<b>Female enlisted</b>					
Nonjuniors	75	3.5	1.03	-0.71	0.241
Juniors	348	3.6	0.91		
<b>Non-black male officers</b>					
Nonjuniors	66	22.3	1.07	2.55	0.0065
Juniors	271	21.9	0.91		
<b>Female officers</b>					
Nonjuniors	37	12.6	3.91	-2.46	0.0085
Juniors	172	14.3	3.28		

\*Paygrade was measured as follows:  
E-1 (1), E-2 (2), E-3 (3), E-4 (4), E-5 (5), E-6 (6), E-7 (7),  
E-8 (8), E-9 (9), W-1 (11), W-2 (12), W-3 (13), W-4 (14), O-1 (21),  
O-2 (22), O-3 (23), O-4 (24), O-5 (25), O-6 (26).

and 2) graduates from the academy would have a longer length of service than others in their paygrade.

As shown in Table A.5 above, a higher proportion of the juniors are academy graduates. Among first termers, officers in pay grades 0-4 and 0-5 probably represent doctors, dentists, or others who enter with a higher rank than ensign (0-1). Juniors may not be represented in as high a proportion among these specialties as they are in the unrestricted line population. This view is supported by the higher proportion of nonjuniors with a direct appointment commissioning source (Table A.5 above), since direct appointment is the primary method of procuring these specialists.

The statistically significantly higher paygrades among junior female officers may be explained by their earlier service entry. Since women were not admitted to the Naval Academy during this period, there was not a source of commissioning affect on paygrade attainment.

#### 7. Current and First Primary MOS

Chi square statistics for the relationship between a change from first primary MOS (specialty) to current primary MOS and parental military experience indicate that there are no statistically significant differences between juniors and nonjuniors.

### B. SATISFACTION WITH AND PERCEPTIONS OF MILITARY

#### 1. Satisfaction with Current Location

Table A.7 presents the results of tests of the relationship between satisfaction with current location and parental military experience for first term groups. The t-tests of the differences in mean satisfaction show statistically significantly higher satisfaction among nonjunior or female officers. Other groups show no statistically

Table A.7  
Satisfaction With Current Location: \* First Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	208	4.1	1.85	1.46	0.0725
Juniors	746	3.9	1.84		
<b>Black male enlisted</b>					
Nonjuniors	111	3.7	1.82	-0.48	0.3165
Juniors	178	3.8	1.87		
<b>Female enlisted</b>					
Nonjuniors	75	4.4	1.51	0.03	0.488
Juniors	340	4.4	1.79		
<b>Non-black male officers</b>					
Nonjuniors	64	5.0	1.80	-0.45	0.3255
Juniors	268	5.1	1.58		
<b>Female officers</b>					
Nonjuniors	38	5.6	1.36	1.97	0.0265
Juniors	189	5.1	1.70		

\*Measured on a seven point scale with 1 labelled very dissatisfied and 7 labelled very satisfied.

significant results. Reasons for the female officer juniors lower satisfaction are not readily apparent.

## 2. Satisfaction with Military as a Way of Life

Table A.8 presents the results of t-tests of differences in mean satisfaction with the military as a way of life between juniors and nonjuniors. Statistically significantly higher satisfaction is shown among junior female officers. For females, this is consistent with a hypothesis that satisfaction with military life experienced during parents' military service contributed to the juniors' entrance into the military. However, there is a lack of statistically significant results among the other groups. The lack of differences in the other groups may reflect the adverse effects of military service on family life. Since female officers have fewer dependents, they could be less affected by these factors.

## 3. Perception of Problems at Current Location

The chi square statistic computed for the five groups indicated that no significant differences existed between first term juniors and nonjuniors in perception of drug use, crime, and racial tension as problems.

As presented in Table A.9, however, the chi square statistic for the non-black male enlisted group indicates a significant relationship exists between being a junior and perceptions of alcohol use. It indicates that a higher proportion of non-black male juniors perceive alcohol to be a problem at their current location. Non-black males constitute 58 percent of the first term enlisted sample. The failure of other groups to perceive alcohol use as a problem may be due to a differing view of

Table A.8  
Satisfaction with Military as a Way of Life: \* First Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	207	2.6	1.60	1.42	0.0079
Juniors	749	2.5	1.53		
<b>Black male enlisted</b>					
Nonjuniors	109	3.0	1.63	-0.38	0.3525
Juniors	178	3.1	1.63		
<b>Female enlisted</b>					
Nonjuniors	75	3.8	1.78	-0.77	0.2225
Juniors	344	3.9	1.74		
<b>Non-black male officers</b>					
Nonjuniors	66	3.9	1.80	-0.53	0.2885
Juniors	267	4.1	1.62		
<b>Female officers</b>					
Nonjuniors	38	4.1	1.96	-1.98	0.0265
Juniors	190	4.8	1.64		

\*Measured on a seven point scale with 1 labelled very dissatisfied and 7 labelled very satisfied.

Table A.9  
Alcohol as a Problem: First Termers

Group	Alcohol Use a Problem at Current Location	
	Little or No Problem	Problem
Non-black male enlisted		
Nonjuniors (210)	106 50.5	104 49.5
Juniors (769)	316 41.6	444 58.4
	$\chi^2 = 4.94353$	$p = 0.0262$
Black male enlisted		
Nonjuniors (112)	52 46.4	60 53.6
Juniors (181)	86 47.5	95 52.5
	$\chi^2 = 0.00365$	$p = 0.9518$
Female enlisted		
Nonjuniors (74)	31 41.3	44 58.7
Juniors (346)	129 37.3	217 62.7
	$\chi^2 = 0.27445$	$p = 0.6004$
Non-black male officers		
Nonjuniors (66)	29 43.9	37 56.1
Juniors (271)	128 47.2	143 52.8
	$\chi^2 = 0.11789$	$p = 0.7313$
Female officers		
Nonjuniors (38)	16 42.1	22 57.9
Juniors (191)	61 31.9	130 68.1
	$\chi^2 = 1.04799$	$p = 0.3060$

the situation from the perspective of officers or female enlisted, or possibly a different perception of alcoholism.

#### 4. Problems on PCS Moves

Analysis of chi square statistics indicate that no significant differences exist between nonjuniors and juniors in regard to the following problems on PCS moves: unreimbursed moving expenses; finding employment for spouse; continuing education; finding shopping and recreation facilities; spouse's adjustment to the PCS move; and respondent's own adjustment to the PCS move.

Problems on PCS moves which were different for juniors and nonjuniors are: adjustment to high costs; moving and setting up; finding off-duty employment; finding permanent housing; and children's adjustment to PCS move.

##### a. Adjustment to High Costs on PCS Move

Table A.10 presents the relationship between parental military experience and problems from adjustment to high costs on a PCS move. The chi square statistics indicate that a statistically significant relationship exists for non-black male officers, the largest part of the officer population. The non-black male officer juniors had fewer problems than nonjuniors. The lack of statistically significant differences among juniors and nonjuniors for the enlisted groups may reflect the lower enlisted pay scales. Female officers have fewer dependents than male officers, and this may have contributed to the lack of statistically significant differences among juniors and nonjuniors for them.

Table A.10  
Adjustment to High Costs on PCS Move: First Termers

Group	Adjustment to High Costs on PCS Move	
	Little or No Problem	Problem
Non-black male enlisted		
Nonjuniors (210)	141	69
Juniors (760)	67.1	32.9
	486	274
	63.9	36.1
	$\chi^2 = 0.60189$	$p = 0.4379$
Black male enlisted		
Nonjuniors (112)	75	37
Juniors (181)	67.0	33.0
	109	72
	60.2	39.8
	$\chi^2 = 1.07350$	$p = 0.3002$
Female enlisted		
Nonjuniors (75)	48	27
Juniors (346)	64.0	36.0
	220	126
	63.6	36.4
	$\chi^2 = 0.0$	$p = 1.0$
Non-black male officers		
Nonjuniors (66)	35	31
Juniors (337)	53.0	47.0
	184	87
	67.9	32.1
	$\chi^2 = 4.52234$	$p = 0.0335$
Female officers		
Nonjuniors (38)	21	17
Juniors (191)	55.3	44.7
	117	74
	61.3	38.7
	$\chi^2 = 0.25808$	$p = 0.6114$

b. Moving and Setting Up on PCS Move

The relationships between moving and setting up problems on PCS moves and parental military experience is presented in Table A.11. The chi square statistics indicate that a statistically significant relationship exists for the non-black male officers, the largest group of officers. Lack of statistically significant relationships between these problems and parental military experience among enlisted groups may be explained by a different perception of enlisted personnel as to what constitutes a problem in moving and setting up. The female officers' lower number of dependents may again explain the lack of significant differences for female officers.

c. Finding Off-Duty Employment on PCS Move

Table A.12 presents the relationships between parental military experience and problems in finding off-duty employment after PCS moves. The chi square statistics indicate that no statistically significant relationships exist for all of the enlisted groups. However, both officer groups show statistically higher proportions of nonjuniors encountered problems in finding off-duty employment. The difference between the enlisted groups and the officer groups may be due to smaller the number of officers who work at a second job.

d. Finding Permanent Housing on PCS Move

Table A.13 presents the relationship between parental military experience and problems in finding permanent housing. The chi square statistics show a statistically significant relationship only for the female officer group. The female officers may have different housing needs and expectations than the enlisted and male officer groups.

Table A.11  
Moving and Setting Up on PCS Move: First Termers

Group	Moving and Setting up on PCS Move	
	Little or No Problem	Problem
Non-black male enlisted		
Nonjuniors (210)	165 78.6	45 21.4
Juniors (760)	578 76.1	182 23.9
	$\chi^2 = 0.45030$	$p = 0.5022$
Black male enlisted		
Nonjuniors (112)	89 79.5	23 20.5
Juniors (181)	147 81.22	34 18.8
	$\chi^2 = 0.04671$	$p = 0.8289$
Female enlisted		
Nonjuniors ( 75)	50 66.7	25 33.3
Juniors (346)	250 72.3	96 27.7
	$\chi^2 = 0.68664$	$p = 0.4073$
Non-black male officers		
Nonjuniors ( 66)	33 50.0	33 50.0
Juniors (271)	176 64.9	95 35.1
	$\chi^2 = 4.41776$	$p = 0.0356$
Female officers		
Nonjuniors ( 38)	20 52.6	18 47.4
Juniors (191)	132 69.1	59 30.9
	$\chi^2 = 3.15310$	$p = 0.0758$

Table A.12  
Finding Off-Duty Employment on PCS Move: First Termers

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Group	Finding Off-Duty Employment on PCS Move	
	Little or No Problem	Problem
Non-black male enlisted		
Nonjuniors (210)	172	38
Juniors (760)	81.9 649 85.4	18.1 111 14.6
	$\chi^2 = 1.28467$	$p = 0.2570$
Black male enlisted		
Nonjuniors (112)	88	24
Juniors (181)	78.6 135 74.6	21.4 46 25.4
	$\chi^2 = 0.40516$	$p = 0.5244$
Female enlisted		
Nonjuniors ( 75)	63	12
Juniors (346)	84.0 306 88.4	16.0 40 11.6
	$\chi^2 = 0.74947$	$p = 0.3866$
Non-black male officers		
Nonjuniors ( 66)	60	6
Juniors (271)	90.9 265 97.8	9.1 6 2.2
	$\chi^2 = 5.4436/$	$p = 0.0196$
Female officers		
Nonjuniors ( 38)	35	3
Juniors (191)	92.1 189 99.0	7.9 2 1.0
	$\chi^2 = 4.12157$	$p = 0.0423$

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Table A.13  
Finding Housing as a Problem on PCS Move: First Termers

Group	Finding Housing as a Problem on PCS Move	
	Little or No Problem	Problem
Non-black male enlisted		
Nonjuniors (210)	174 82.9	36 17.1
Juniors (760)	613 80.7	147 19.3
	$\chi^2 = 0.38616$	$p = 0.5343$
Black male enlisted		
Nonjuniors (112)	89 79.5	23 20.5
Juniors (181)	155 85.6	26 14.4
	$\chi^2 = 1.47474$	$p = 0.2246$
Female enlisted		
Nonjuniors (75)	61 81.3	14 18.7
Juniors (346)	274 79.2	72 20.8
	$\chi^2 = 0.06722$	$p = 0.7954$
Non-black male officers		
Nonjuniors (66)	46 69.7	20 30.3
Juniors (271)	205 75.6	66 24.4
	$\chi^2 = 0.69967$	$p = 0.4028$
Female officers		
Nonjuniors (38)	22 57.9	16 42.1
Juniors (191)	147 77.0	44 23.0
	$\chi^2 = 5.01470$	$p = 0.0251$

e. Children's Adjustment to PCS Move

Table A.14 presents the relationships for first term groups between parental military experience and problems with childrens' adjustment to PCS moves. Only the chi square statistic for female officers indicates a statistically significant relationship, showing a higher proportion of nonjuniors who experienced these problems. The larger proportions of other groups with children may explain the lack of statistically significant relationships among the other groups.

On PCS moves, officer juniors experienced fewer problems in the areas discussed above than did officer nonjuniors. It can be hypothesized that in these areas, the experience of PCS moves during parental military service may have contributed to reducing problems in dealing with the new environment. Alternatively, the juniors may be less likely to consider a PCS experience as a problem than nonjuniors who may not have had previous experience with moves. A differential perception of what constitutes a problem may also help explain why enlisted juniors were not statistically different from nonjuniors on what problems were encountered on PCS moves.

5. Morale at Current Location

Table A.15 presents the results of tests of the relationship between assessment of morale at current location and parental military experience. The t-tests of the differences in mean assessment of morale show statistically significantly lower assessment of morale by juniors in the non-black male enlisted and female enlisted groups, the majority of the enlisted population. This difference in assessment may be due to a higher expectation among juniors of what should be the level of

Table A.14  
Childrens' Adjustment to PCS Move: First Termers

Group	Children's Adjustment to PCS Move	
	Little or No Problem	Problem
Non-black male enlisted		
Nonjuniors (210)	205	5
Juniors (760)	97.6	2.4
Juniors (760)	740	20
Nonjuniors (210)	97.4	2.6
	$\chi^2 = 0.0$	$p = 1.0$
Black male enlisted		
Nonjuniors (112)	108	4
Juniors (181)	96.4	3.6
Nonjuniors (112)	175	6
Juniors (181)	96.7	3.3
	$\chi^2 = 0.0$	$p = 1.0$
Female enlisted		
Nonjuniors (75)	74	1
Juniors (346)	98.7	1.3
Nonjuniors (75)	341	5
Juniors (346)	98.6	1.4
	$\chi^2 = 0.0$	$p = 1.0$
Non-black male officers		
Nonjuniors (66)	64	2
Juniors (271)	97.0	3.0
Nonjuniors (66)	266	5
Juniors (271)	98.2	1.8
	$\chi^2 = 0.01543$	$p = 0.9011$
Female officers		
Nonjuniors (38)	35	3
Juniors (191)	92.1	7.9
Nonjuniors (38)	189	2
Juniors (191)	99.0	1.0
	$\chi^2 = 4.12157$	$p = 0.0423$

Table A.15  
 Analysis of Differences in Morale\* at  
 Current Location: First Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	209	2.9	1.55	1.67	0.048
Juniors	752	2.7	1.39		
<b>Black male enlisted</b>					
Nonjuniors	112	3.1	1.62	-0.51	0.3045
Juniors	175	3.2	1.61		
<b>Female enlisted</b>					
Nonjuniors	74	3.5	1.53	1.98	0.025
Juniors	344	3.1	1.53		
<b>Non-black male officers</b>					
Nonjuniors	66	3.6	1.62	-1.25	0.107
Juniors	270	3.9	1.43		
<b>Female officers</b>					
Nonjuniors	37	3.5	1.57	-0.17	0.4345
Juniors	190	3.6	1.38		

\*Measured on a seven point scale with 1 labelled morale is very low and 7 labelled morale is very high.

morale. Black male enlisted and officer juniors appear to have a perspective on morale more closely resembling that of nonjuniors.

#### 6. Personnel's Ability to Perform Wartime Mission

The results of tests of the relationship between assessment of personnel's ability to perform wartime mission and parental military experience are presented in Table A.16. The t-tests of the differences in mean assessment of personnel's ability to perform missions show statistically significantly greater assessment of abilities by junior female officers. The female officer assessments may be based upon less specific operational knowledge as female officers do not generally have a warfare specialty. This might allow a more optimistic assessment by juniors to appear.

#### 7. Equipment's Ability to Perform Wartime Mission

The results of t-tests of the differences in mean assessment of equipment's ability show no statistically significant differences between juniors and nonjuniors.

### C. CAREER AND REENLISTMENT INTENTIONS

#### 1. Years of Service Expectations

There were no statistically significant differences between juniors and nonjuniors in t-tests of the differences in mean years of service expected.

#### 2. Paygrade Expectations

The results of tests of the relationship between paygrade expected to have when leaving service and parental military experience are presented in Table A.17. The t-tests of the differences in paygrade expected to have show statistically significantly higher paygrades

Table A.16  
 Analysis of Differences in Personnel's Ability\*  
 To Perform Wartime Mission: First Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	175	4.9	1.53	1.48	0.0685
Juniors	656	4.7	1.59		
<b>Black male enlisted</b>					
Nonjuniors	88	4.7	1.91	-0.59	0.2765
Juniors	147	4.9	1.66		
<b>Female enlisted</b>					
Nonjuniors	51	4.5	1.60	0.48	0.315
Juniors	277	4.4	1.58		
<b>Non-black male officers</b>					
Nonjuniors	62	5.1	1.28	-0.42	0.3365
Juniors	646	5.2	1.33		
<b>Female officers</b>					
Nonjuniors	31	4.3	1.32	-2.38	0.011
Juniors	161	4.9	1.31		

\*Measured on a seven point scale with 1 labelled not perform at all and 7 labelled perform very well.

Table A.17  
 Analysis of Differences in Paygrade\* Expected to Have  
 When Leave Service Between Juniors and Nonjuniors: First Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	208	5.1	1.51	1.84	0.0385
Juniors	757	4.9	1.18		
<b>Black male enlisted</b>					
Nonjuniors	111	4.9	1.79	-0.92	0.1785
Juniors	180	5.1	1.71		
<b>Female enlisted</b>					
Nonjuniors	74	5.0	1.07	-0.77	0.220
Juniors	341	5.1	1.49		
<b>Non-black male officers</b>					
Nonjuniors	65	24.0	1.39	0.90	0.186
Juniors	268	23.8	1.48		
<b>Female officers</b>					
Nonjuniors	36	24.1	1.39	1.87	0.034
Juniors	188	23.6	1.41		

\*Paygrade was measured as follows:

E-1 (1), E-2 (2), E-3 (3), E-4 (4), E-5 (5), E-6 (6), E-7 (7),  
 E-8 (8), E-9 (9), W-1 (11), W-2 (12), W-3 (13), W-4 (14), O-1 (21),  
 O-2 (22), O-3 (23), O-4 (24), O-5 (25), O-6 (26).

are expected by nonjuniors in the non-black male enlisted and female officer groups. These results are consistent with the higher satisfaction with military life shown in Table 4.11 for these two groups, but is inconsistent with the expectation that juniors would expect to follow their parents' experience.

### 3. Likeliness to Reenlist

The t-tests of the differences between juniors and nonjuniors in mean likeliness to reenlist show no statistically significant differences between juniors and nonjuniors in likeliness to reenlist without a bonus or likeliness to reenlist to train for a new career.

### 4. Earnings Expected in Civilian Job

Table A.18 presents the relationship between the earnings the respondent would expect at a civilian job and parental military service. The t-tests of differences in mean expected civilian earnings show statistically significantly greater civilian pay expectations for the non-black male officer nonjuniors. The non-black male officers are the majority of the officer population. This is probably due to the lower paygrade of the juniors in this group (see Table A.6), which as discussed, is most probably due to the high proportions of juniors with commissions from the Naval Academy.

Table A.18  
Earnings Expected in Civilian Job: First Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	204	\$30,257.62	30,923.92	0.60	0.274
Juniors	750	28,801.91	29,685.51		
<b>Black male enlisted</b>					
Nonjuniors	108	36,930.14	3,553.60	1.31	0.096
Juniors	174	35,613.88	2,699.88		
<b>Female enlisted</b>					
Nonjuniors	70	52,480.94	39,020.88	1.44	0.076
Juniors	339	45,080.04	38,026.88		
<b>Non-black male officers</b>					
Nonjuniors	66	38,116.89	27,322.95	1.74	0.0425
Juniors	267	31,649.39	26,030.60		
<b>Female officers</b>					
Nonjuniors	38	32,092.84	27,990.17	0.88	0.191
Juniors	190	27,724.69	27,252.49		

## APPENDIX B

### SECOND TERM

Enlisted personnel in their second enlistment and officers with six to ten years of service are included in this category. These individuals might be considered career conditional, having continued past their initial period of service.

#### A. SOCIOECONOMIC CHARACTERISTICS

##### 1. Age at Service Entry

Table B.1 presents the relationship between age when entered service and parental military service for the second term groups. The t-tests of the differences in mean age of entry show statistically significant older age at entry for the non-black male enlisted (75% of the enlisted sample), and both officer groups. These results point to an earlier interest in the military among juniors in these groups. The failure of the black and female enlisted populations to exhibit a similar relationship may be due to the black enlisted delaying entry in search of education (see Table B.4 below), and female enlisted to a desire to try other alternatives first with the military seen as a fallback position.

##### 2. Father's Education

The relationship between parental military experience and father's education is presented in Table B.2. The t-tests of the differences in the mean years of father's education indicate that fathers of juniors in the non-black male enlisted, black male enlisted, and

Table B.1  
Age at Service Entry: Second Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	188	19.2	1.934	2.77	0.003
Juniors	616	18.8	1.474		
<b>Black male enlisted</b>					
Nonjuniors	53	18.6	1.36	-0.88	0.190
Juniors	108	18.8	2.04		
<b>Female enlisted</b>					
Nonjuniors	15	20.0	2.30	-0.58	0.283
Juniors	96	20.4	2.86		
<b>Non-black male officers</b>					
Nonjuniors	52	21.8	3.11	2.83	0.003
Juniors	243	20.5	2.56		
<b>Female officers</b>					
Nonjuniors	17	23.8	3.36	2.50	0.011
Juniors	68	21.7	1.92		

Table B.2  
Years of Father's Education: Second Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	161	10.8	3.50	-3.08	0.001
Juniors	562	11.7	2.96		
<b>Black male enlisted</b>					
Nonjuniors	48	10.4	3.68	-1.99	0.025
Juniors	98	11.6	2.91		
<b>Female enlisted</b>					
Nonjuniors	15	10.8	4.89	-0.68	0.2525
Juniors	77	11.7	3.46		
<b>Non-black male officers</b>					
Nonjuniors	50	12.2	3.59	-3.29	0.001
Juniors	231	14.0	3.33		
<b>Female officers</b>					
Nonjuniors	15	13.7	3.37	-0.24	0.4065
Juniors	66	13.9	3.02		

non-black male officer groups have statistically significantly more years of education than fathers of nonjuniors. This may likely be due to the educational benefits of the GI Bill, but may also be affected by the military's selection of fathers based on measures of mental ability and education. While both female groups show juniors' fathers with higher education, the t-tests were not statistically significant. It is not apparent why these results are not significant as they were for the male groups.

### 3. Marital Status at Service Entry

Table B.3 presents the relationships between parental military experience and marital status at service entry. The chi square statistics indicate that no statistically significant differences exist for the second term groups.

### 4. Respondent's Years of Education

The relationship between respondents' education and parental military experience is presented in Table B.4. A t-tests of difference in mean years of education for non-black male officers shows statistically significantly higher years of education for nonjuniors. This may be due to early age of entry among juniors, and to the high proportion of juniors entering via the Naval Academy, whose four years are included in years of service when determining LOS group. Among black male enlisted, the statistically significantly longer years of education for juniors may be due to the affects of the military as a "bridging environment" upon their fathers, which by improving the fathers' education and job opportunities, indirectly improved the children's as well.

Table B.3  
Marital Status at Service Entry: Second Termers

Group Size	Marital Status at Service Entry		
	Married	Divorced/ Separated/ Widowed	Single/ Never Married
Non-black male enlisted			
Nonjuniors (188)	12 6.4	2 1.1	174 92.6
Juniors (620)	66 10.6	7 1.1	547 88.2
	$\chi^2 = 3.02292$ $p = 0.2206$		
Black male enlisted			
Nonjuniors (54)	3 5.6	1 1.9	50 92.6
Juniors (109)	11 10.1	0 0.0	98 89.9
	$\chi^2 = 2.91229$ $p = 0.2331$		
Female enlisted			
Nonjuniors (15)	1 6.7	3 20.0	11 73.3
Juniors (96)	5 5.2	9 9.4	82 85.4
	$\chi^2 = 1.63180$ $p = 0.4422$		
Non-Black male officers			
Nonjuniors (52)		2 3.8	50 96.2
Juniors (238)		3 1.3	235 98.7
	$\chi^2 = 0.50359$ $p = 0.4779$		
Female officers			
Nonjuniors (17)		0 0.0	17 100.0
Juniors (68)		1 1.5	67 98.5
	$\chi^2 = 0.0$ $p = 1.0$		

Table B.4  
Years of Education: Second Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	187	12.6	0.64	-0.03	0.4875
Juniors	618	12.6	0.71		
<b>Black male enlisted</b>					
Nonjuniors	54	12.1	1.30	-1.89	0.0315
Juniors	109	12.4	0.95		
<b>Female enlisted</b>					
Nonjuniors	14	12.9	1.60	0.05	0.4795
Juniors	96	12.8	1.35		
<b>Non-black male officers</b>					
Nonjuniors	51	17.4	1.64	2.19	0.016
Juniors	243	16.8	1.39		
<b>Female officers</b>					
Nonjuniors	17	16.7	2.09	1.05	0.1535
Juniors	69	16.1	1.44		

### 5. Commission Source

The relationship between parental military experience and commissioning source are presented in Table B.5. The chi square statistics indicate that no statistically significant relationships exist for the second term officer groups.

### 6. Current Paygrade

The relationship between current paygrade and parental military experience is shown in Table B.6. The statistically higher paygrade of juniors shown by the t-test for differences in mean paygrade for black male enlisted may be explained by the higher educational attainments of black male juniors (see Table B.4 above). The statistically significantly lower paygrades for the two female groups cannot be easily explained. It should be emphasized that in the majority of both the enlisted and officer populations, non-black males, no statistically significant differences existed between juniors and nonjuniors.

### 7. Current and First Primary MOS

In Table B.7 showing the relationships between changes from the first primary specialty to the respondents' current primary and parental military experience, the chi square statistics indicate that no statistically significant relationships exist for second term groups.

## B. SATISFACTION WITH AND PERCEPTIONS OF MILITARY

### 1. Attitudes About Current Location

Table B.8 presents the relationship between attitudes about current location and parental military experience. The t-tests of the differences in mean feelings about location for non-black male enlisted indicate that nonjuniors had a statistically significantly more positive

Table B.5  
Commissioning Source: Second Termers

Group	Commission Source						
	Academy	OCS/ RSRV	ROTC REG.	ROTC SCHLRSHIP	AVIA OC	DIR APPT	Other
<b>Non-black male</b>							
Nonjuniors ( 52)	9 17.3	12 23.1	2 3.8	3 5.8	10 19.2	4 7.7	12 23.1
Juniors ( 242)	64 26.4	42 17.4	20 8.3	18 7.4	50 20.7	5 2.1	43 17.8
		$\chi^2 = 8.59959$			$p = 0.19738$		
<b>Female officers</b>							
Nonjuniors ( 17)		8 47.1			3 17.6	6 35.3	
Juniors ( 69)		42 60.9			11 15.9	16 23.1	
		$\chi^2 = 1.25319$			$p = 0.5344$		

Note: Since enlisted personnel do not receive a commission, no statistics are available for enlisted personnel.

Table B.6  
Current Paygrade: \* Second Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	187	5.3	0.64	-0.34	0.3665
Juniors	619	5.3	0.71		
<b>Black male enlisted</b>					
Nonjuniors	54	12.1	1.30	-1.89	0.0315
Juniors	109	12.4	0.95		
<b>Female enlisted</b>					
Nonjuniors	15	5.1	0.59	2.13	0.023
Juniors	96	4.7	0.68		
<b>Non-black male officers</b>					
Nonjuniors	52	23.0	0.79	0.33	0.3225
Juniors	244	22.9	0.80		
<b>Female officers</b>					
Nonjuniors	17	23.4	0.49	2.22	0.018
Juniors	69	23.1	0.48		

\*Paygrade was measured as follows:  
E-1 (1), E-2 (2), E-3 (3), E-4 (4), E-5 (5), E-6 (6), E-7 (7),  
E-8 (8), E-9 (9), W-1 (11), W-2 (12), W-3 (13), W-4 (14), O-1 (21),  
O-2 (22), O-3 (23), O-4 (24), O-5 (25), O-6 (26).

Table B.7

## Current and First Primary Specialty: Second Termers

Group	Current and First Specialty the Same	
	Yes	No
Non-black male enlisted		
Nonjuniors (170)	114	56
Juniors (597)	67.1	32.9
	435	162
	72.9	27.1
	$\chi^2 = 2.59112$	$p = 0.2737$
Black male enlisted		
Nonjuniors ( 48)	28	20
Juniors ( 96)	58.3	41.7
	61	35
	63.6	63.5
	$\chi^2 = 1.23431$	$p = 0.5395$
Female enlisted		
Nonjuniors ( 13)	8	5
Juniors ( 85)	61.5	38.5
	53	32
	62.3	37.6
	$\chi^2 = 0.52874$	$p = 0.7677$
Non-black male officers		
Nonjuniors ( 48)	20	28
Juniors (235)	41.7	58.3
	77	158
	32.7	67.2
	$\chi^2 = 1.44821$	$p = 0.4845$
Female officers		
Nonjuniors ( 16)	5	11
Juniors ( 66)	31.3	68.8
	21	45
	31.8	68.2
	$\chi^2 = 0.80051$	$p = 0.6701$

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Table B.8  
Satisfaction With Current Location: \* Second Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	185	4.9	1.73	2.27	0.012
Juniors	618	4.6	1.91		
<b>Black male enlisted</b>					
Nonjuniors	54	4.4	2.00	0.65	0.2575
Juniors	108	4.2	1.85		
<b>Female enlisted</b>					
Nonjuniors	15	3.7	1.91	-1.42	0.0665
Juniors	96	4.5	1.80		
<b>Non-black male officers</b>					
Nonjuniors	52	5.5	1.60	1.01	0.1585
Juniors	241	5.3	1.65		
<b>Female officers</b>					
Nonjuniors	17	5.2	1.379	-0.67	0.255
Juniors	69	5.6	1.54		

\*Measured on a seven point scale with 1 labelled very dissatisfied and 7 labelled very satisfied.

attitude about location than juniors. It is unclear why 75 percent of enlisted personnel show this difference and other groups do not. It may be related to differing expectations about locations among the groups while observed differences in the non-black male enlisted group might be due to higher expectations among juniors due to wider experience of locations during parental military service.

## 2. Satisfaction with Military as a Way of Life

Table B.9 presents the results of t-tests of the differences in mean satisfaction with the military as a way of life between juniors and nonjuniors. Statistically significantly lower satisfaction is shown among junior male enlisted. Among the non-black male enlisted group, this may reflect juniors' adverse perceptions of alcohol use (see Table B.10 below). Among the black male enlisted group, the dissatisfaction among juniors may be a result of black juniors' higher educational attainments (Table B.4 above).

## 3. Perception of Problems at Current Location

The chi square statistics for the five groups indicated that no significant differences existed between second term groups in perception of drug use, crime, and racial tension as problems. As presented in Table B.10, however, the chi square statistic for the non-black male group indicates a significant relationship exists between being a junior and perceptions of alcohol use. It shows that among non-black males, a higher proportion of juniors perceive alcohol use to be a problem at their current location. Non-black males are 75 percent of the second term enlisted group. The failure of other groups to perceive alcohol use as a problem may be due to a differing view of the situation from the

Table B.9  
Satisfaction with Military as a Way of Life: \* Second Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	183	4.0	1.76	2.19	0.0185
Juniors	616	3.7	1.79		
<b>Black male enlisted</b>					
Nonjuniors	53	4.2	1.52	1.72	0.044
Juniors	108	3.8	1.62		
<b>Female enlisted</b>					
Nonjuniors	14	4.0	1.69	-0.26	0.3995
Juniors	92	4.2	1.62		
<b>Non-black male officers</b>					
Nonjuniors	53	4.1	1.61	-0.05	0.482
Juniors	241	4.2	1.54		
<b>Female officers</b>					
Nonjuniors	17	4.6	1.58	-1.19	0.123
Juniors	69	5.1	1.43		

\*Measured on a seven point scale with 1 labelled very dissatisfied and 7 labelled very satisfied.

Table B.10  
Alcohol as a Problem: Second Termers

Group	Alcohol Use a Problem at Current Location	
	Little or No Problem	Problem
Non-black male enlisted		
Nonjuniors (188)	115 56.2	73 38.8
Juniors (620)	302 48.7	318 51.3
	$\chi^2 = 8.47653$	$p = 0.0036$
Black male enlisted		
Nonjuniors ( 54)	31 57.4	23 42.6
Juniors (109)	66 60.6	43 39.4
	$\chi^2 = 0.04634$	$p = 0.8296$
Female enlisted		
Nonjuniors ( 115	9 60.0	6 40.0
Juniors ( 96)	36 37.5	60 62.5
	$\chi^2 = 1.87108$	$p = 0.1714$
Non-black male officers		
Nonjuniors ( 52)	26 50.0	26 50.0
Juniors (244)	116 47.5	128 52.5
	$\chi^2 = 0.02869$	$p = 0.8655$
Female officers		
Nonjuniors ( 17)	8 47.1	9 52.9
Juniors ( 69)	30 43.4	39 56.5
	$\chi^2 = 0.0$	$p = 1.0$

perspective of the officers or female enlisted, or possibly to a differing perception of alcoholism.

#### 4. Problems on PCS Moves

Analysis of chi square statistics indicate that no significant differences exist between nonjuniors and juniors in regard to the following problems on PCS moves: adjustment to a higher cost of living; moving and setting up; unreimbursed moving expenses; finding off-duty employment; finding employment for spouse; continuing education; finding permanent housing; finding shopping and recreation facilities; spouse's adjustment to the PCS move; and respondent's own adjustment to the PCS move.

##### a. Children's Adjustment to PCS Move

Table B.11 presents the relationship for second term groups between parental military experience and problems with children's adjustment to PCS Moves. The chi square statistics indicate that among non-black male officers, a statistically significantly higher proportion of nonjuniors experienced these problems. The differences between the non-black male officers and the other groups may be due to a later starting of a family by officers relative to enlisted groups, and to a smaller number of dependents among female officers.

The fewer problems experienced by juniors in this area is consistent with the hypothesis that the experience of PCS moves during parental military service of juniors of career personnel may have contributed to reducing problems with the new environment.

Table 8.11  
Children's Adjustment to PCS Move: Second Termers

Group	Children's Adjustment to PCS Move	
	Little or No Problem	Problem
Non-black male enlisted		
Nonjuniors (188)	175 93.1	13 6.9
Juniors (620)	583 94.0	37 6.0
	$\chi^2 = 0.08962$	$p = 0.7647$
Black male enlisted		
Nonjuniors (54)	51 94.4	3 5.6
Juniors (109)	101 92.7	8 7.3
	$\chi^2 = 0.00915$	$p = 0.9238$
Female enlisted		
Nonjuniors (15)	14 93.3	1 6.7
Juniors (96)	95 99.0	1 1.0
	$\chi^2 = 0.22992$	$p = 0.6316$
Non-black male officers		
Nonjuniors (52)	44 84.6	8 15.4
Juniors (244)	234 95.9	10 4.1
	$\chi^2 = 7.68619$	$p = 0.0056$
Female officers		
Nonjuniors (17)	16 94.1	1 5.9
Juniors (69)	68 98.6	1 1.4
	$\chi^2 = 0.03535$	$p = 0.8509$

Overall, the lack of differences between second term juniors and nonjuniors may be due to personal experience of PCS moves gained during the first term by both juniors and nonjuniors.

#### 5. Assessments of Morale and Performance Abilities

The t-tests of the differences between juniors and nonjuniors in mean assessments of morale at current location, personnel's ability to perform wartime mission, and equipment's ability to perform wartime mission show no statistically significant differences between juniors and nonjuniors.

### C. CAREER AND REENLISTMENT INTENTIONS

#### 1. Years of Service Expectations

The t-tests of differences in mean years of service expected show no statistically significant differences between juniors and nonjuniors in second term groups.

#### 2. Final Paygrade Expectations

No statistically significant differences were found by t-tests of mean paygrade expected to have when leaving service between juniors and nonjuniors.

#### 3. Likeness to Reenlist

No statistically significant differences between juniors and nonjuniors were found by t-tests of differences in mean likeliness to reenlist without a bonus or to reenlist to train in a new career. The second term groups also showed no differences between juniors and nonjuniors in reenlistment intentions.

#### 4. Earnings Expected in Civilian Job

Table B.12 presents the relationship between the earnings the respondent would expect at a civilian job and parental military service. A statistically significant difference between juniors and nonjuniors is indicated by t-tests of differences in mean civilian earnings expected by non-black male enlisted. This difference may reflect a less realistic appraisal of the civilian job market due to less contact with it during childhood years by juniors of careerists.

Table B.12  
Earnings Expected in Civilian Job: Second Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	185	\$37,105.52	2,418.15	2.58	0.0055
Juniors	617	30,227.17	1,132.63		
<b>Black male enlisted</b>					
Nonjuniors	53	39,384.60	36,067.98	0.28	0.3915
Juniors	108	37,736.23	34,460.97		
<b>Female enlisted</b>					
Nonjuniors	14	34,110.86	36,092.40	-0.77	0.2205
Juniors	94	42,129.45	37,485.61		
<b>Non-black male officers</b>					
Nonjuniors	52	32,260.62	18,690.75	-0.32	0.375
Juniors	236	33,355.75	22,485.94		
<b>Female officers</b>					
Nonjuniors	17	43,489.88	34,789.70	0.43	0.337
Juniors	69	39,553.22	31,515.73		

## APPENDIX C

### THIRD TERM

Enlisted personnel in their third or subsequent enlistment and officers with more than ten years' service are included in this category. Individuals in this category may be considered as careerists. Due to the military socialization process and the impact of common experiences, it should be expected that juniors and nonjuniors will have few differences in attitudes and intentions.

#### A. SOCIOECONOMIC CHARACTERISTICS

##### 1. Age at Service Entry

Table C.1 presents the results of tests of the relationship between age at entry and parental military experience for third term groups. The t-tests of the differences in mean age at entry show statistically significantly lower mean age at entry for juniors in all male groups. The lack of statistically significant differences in the female groups may be due to differing perceptions of the military as a job between males and females, as well as to the limited opportunities for women in the military at the time these women would have entered. As with the first and second term groups, these results indicate an earlier interest in the military by juniors.

##### 2. Fathers' Education

Table C.2 presents the results of tests of the relationship between parental military experience and fathers' education. The t-tests

Table C.1  
Age at Service Entry: Third Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	354	19.0	1.96	5.33	0.000
Juniors	692	18.4	1.58		
<b>Black male enlisted</b>					
Nonjuniors	66	18.9	1.21	3.48	0.0005
Juniors	76	18.2	1.16		
<b>Female enlisted</b>					
Nonjuniors	8	18.9	0.84	-0.23	0.4095
Juniors	26	18.9	1.15		
<b>Non-black male officers</b>					
Nonjuniors	402	21.0	2.92	6.26	0.000
Juniors	583	19.8	2.88		
<b>Female officers</b>					
Nonjuniors	31	23.6	3.56	0.89	0.1875
Juniors	53	23.0	3.02		

Table C.2  
Years of Father's Education: Third Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	306	10.0	3.77	-4.93	0.000
Juniors	610	11.2	3.09		
<b>Black male enlisted</b>					
Nonjuniors	56	9.5	3.28	-0.79	0.2165
Juniors	65	9.9	2.84		
<b>Female enlisted</b>					
Nonjuniors	5	9.8	2.05	-1.19	0.1845
Juniors	21	11.1	2.70		
<b>Non-black male officers</b>					
Nonjuniors	362	12.2	3.70	-1.81	0.0355
Juniors	544	11.6	3.81		
<b>Female officers</b>					
Nonjuniors	25	11.2	4.05	-0.82	0.208
Juniors	45	12.0	3.57		

of the differences in mean years of father's education show that juniors' fathers' had statistically significantly more years of education for all non-black male enlisted and officers. The GI Bill educational benefits may explain these juniors' fathers' greater education attainment. It may also be partially explained by the effect on the parent population of the military's use of minimum levels of mental capacity and education as screening criteria. The lack of statistically significant differences for black male enlisted may be due to generally limited educational opportunities available to their parents. The limited military opportunities for women at the time they entered the Navy may explain the lack of statistically significant differences for female groups.

### 3. Marital Status at Service Entry

In the analysis of the relationship between marital status at service entry and parental military experience, the chi square statistics indicated no statistically significant differences between juniors and nonjuniors.

### 4. Respondent's Years of Education

Table C.3 presents the results of tests of the relationship between years of education and parental military experience. The t-tests of the differences in mean years of education show statistically significantly greater years of education for non-black male officer nonjuniors. This may be due to the juniors significantly earlier age at entry (Table C.1 above) and the higher proportions of juniors who received their commission from the Naval Academy (see Table C.4 below).

Table C.3  
Years of Education: Third Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	355	12.5	1.45	-0.07	0.4735
Juniors	697	12.5	1.22		
<b>Black male enlisted</b>					
Nonjuniors	68	12.2	1.15	-0.66	0.206
Juniors	76	12.4	1.03		
<b>Female enlisted</b>					
Nonjuniors	8	12.9	1.25	-0.39	0.353
Juniors	26	13.1	1.44		
<b>Non-black male officers</b>					
Nonjuniors	408	17.3	1.81	2.55	0.0055
Juniors	587	17.0	1.79		
<b>Female officers</b>					
Nonjuniors	31	17.0	1.54	0.94	0.1755
Juniors	53	16.6	1.53		

### 5. Commission Source

Table C.4 presents the relationship between source of commission and parental military experience for the officer groups. A chi square statistic indicates that a statistically significantly higher proportions of juniors received commissions from the Naval Academy or ROTC scholarship programs. These higher proportions may be due not only to a greater and earlier interest in military service of juniors, but also to preferential admission of juniors. The exclusion of women from the Academy and ROTC programs during the period the third term officers entered the Navy may explain the lack of significant differences in commission sources for female officers.

### 6. Current Paygrade

Table C.5 presents the results of t-tests of the differences in mean paygrade between juniors and nonjuniors. The t-test results indicate that there are statistically significantly higher paygrades for nonjuniors in the non-black male officers and female officer groups. Reasons for the lower paygrade for non-black male enlisted juniors are not apparent. Lower paygrades for non-black male officer juniors might be explained by the counting of years at the Academy as years of service, thus placing a higher proportion of juniors than their paygrade contemporaries into the third term group. The higher paygrades among nonjunior female officers are probably explained by the higher proportion of nonjuniors entering from the "other" category of commission sources (Table C.4 below). Officers entering in the "other" category are most likely specialists such as doctors, dentists, etc., who are likely to enter with a higher rank than O-1. Therefore, the officers beginning

Table C.4  
Commissioning Source: Third Termers

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Group	Commission Source							
	Academy	LDO/ ARRANT	OCS/ RSRV	ROTC OC	ROTC REG.	SCHLRSHP	AVIA OC	DIR APPT
<b>Non-black male</b>								
Nonjuniors (402)	71 17.7	20 5.0	102 25.4	31 7.7	12 3.0	89 22.1	34 8.5	43 10.7
Juniors (575)	177 30.8	49 8.5	93 16.2	35 6.1	19 3.3	75 13.0	27 4.7	100 17.4
				$\chi^2 = 55.56049$			$p = 0.0000$	
<b>Female officers</b>								
Nonjuniors ( 31)			6 19.3			16 51.6	9 29.0	
Juniors ( 53)			19 35.8			24 45.3	10 18.9	
			$\chi^2 = 2.84594$			$p = 0.24100$		

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Note: Since enlisted personnel do not receive a commission, no statistics are available for enlisted personnel.

Table C.5  
Current Paygrade: \* Third Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	357	6.6	1.00	3.53	0.000
Juniors	697	6.3	0.91		
<b>Black male enlisted</b>					
Nonjuniors	68	6.2	1.52	1.49	0.069
Juniors	76	5.9	1/40		
<b>Female enlisted</b>					
Nonjuniors	8	5.4	2.20	-0.25	0.4035
Juniors	26	5.6	0.90		
<b>Non-black male officers</b>					
Nonjuniors	406	24.6	0.96	8.13	0.000
Juniors	588	24.0	1.32		
<b>Female officers</b>					
Nonjuniors	31	24.7	0.64	2.10	0.0195
Juniors	53	24.4	0.88		

\*Paygrade was measured as follows:  
 E-1 (1), E-2 (2), E-3 (3), E-4 (4), E-5 (5), E-6 (6), E-7 (7),  
 E-8 (8), E-9 (9), W-1 (11), W-2 (12), W-3 (13), W-4 (14), O-1 (21),  
 O-2 (22), O-3 (23), O-4 (24), O-5 (25), O-6 (26).

their first term in higher paygrades will also be in higher paygrades during their third term.

#### 7. Current and First Primary MOS

Chi square statistics for the relationships between a change from first primary MOS (specialty) to current primary MOS indicate that there are no statistically significant differences between juniors and nonjuniors.

### B. SATISFACTION WITH AND PERCEPTIONS OF MILITARY

#### 1. Satisfaction with Current Location

Table C.6 presents the results of tests of the relationship with current location and parental military experience for third term groups. The t-tests of the differences in mean satisfaction with current location show statistically higher satisfaction among junior non-black male officers. This may reflect the lower paygrade of the non-black male officer juniors and of the higher proportions these non-black male officers are Naval Academy graduates (see Table C.5 and C.4 above).

#### 2. Satisfaction with Military as a Way of Life

Table C.7 presents the results of t-tests of differences in mean satisfaction with the military as a way of life between juniors and nonjuniors. Statistically significantly higher satisfaction is shown among junior female officers. The lack of differences between juniors and nonjuniors in the other groups may reflect adverse effects of military service on family life. Since female officers have fewer dependents, they may be less affected by these factors.

Table C.6  
Satisfaction With Current Location: Third Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	353	5.1	1.97	1.61	0.545
Juniors	691	4.9	1.93		
<b>Black male enlisted</b>					
Nonjuniors	66	4.7	2.08	-0.62	0.2695
Juniors	76	5.0	2.14		
<b>Female enlisted</b>					
Nonjuniors	8	5.0	2.20	-0.22	0.4135
Juniors	26	5.2	1.81		
<b>Non-black male officers</b>					
Nonjuniors	406	5.3	1.74	-1.76	0.0395
Juniors	588	5.5	1.58		
<b>Female officers</b>					
Nonjuniors	31	5.8	1.60	1.63	0.0545
Juniors	53	5.2	1.81		

\*Measured on a seven point scale with 1 labelled very dissatisfied and 7 labelled very satisfied.

Table C.7  
Satisfaction with Military as a Way of Life: \* Third Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	352	4.7	1.70	1.52	0.064
Juniors	691	4.5	1.72		
<b>Black male enlisted</b>					
Nonjuniors	66	4.3	1.77	0.94	0.174
Juniors	74	4.1	1.73		
<b>Female enlisted</b>					
Nonjuniors	7	5.4	1.99	1.11	0.1505
Juniors	26	4.5	1.48		
<b>Non-black male officers</b>					
Nonjuniors	402	5.1	1.53	1.31	0.0955
Juniors	584	5.0	1.60		
<b>Female officers</b>					
Nonjuniors	29	5.8	1.27	2.07	0.021
Juniors	52	5.1	1.55		

\*Measured on a seven point scale with 1 labelled very dissatisfied and 7 labelled very satisfied.

### 3. Perception of Problems at Current Location

The chi square statistic computed for the five groups indicated that no significant differences existed between third term juniors and nonjuniors in perception of drug use, crime, and racial tension as problems at their current locations.

#### a. Alcohol Use

As presented in Table C.8, however, the chi square statistics for the female enlisted group indicate a significantly higher proportion of juniors perceive alcohol use to be a problem. This may be due to a different prospective of alcohol use in the military or from a differing perception of alcoholism itself. The differences between the first and second term results and this one may reflect a differing perception of alcoholism by age as well as by sex and rank differences.

#### b. Crime

Table C.9 presents the relationship between perception of crime as a problem and parental military experience. The chi square statistics indicate that a statistically significant relationship exists for non-black male officers. Proportionally more nonjuniors perceived crime to be a problem. It is not apparent why this relationship exists.

### 4. Problems on PCS Moves

Analysis of chi square statistics indicate that no significant differences exist between nonjuniors and juniors in regard to the following problems on PCS moves: adjustment to high costs; moving and setting up; unreimbursed moving expenses; finding off-duty employment; finding employment for spouse; finding permanent housing; finding shopping and

Table C.8  
Alcohol as a Problem: Third Termers

Group	Alcohol Use a Problem at Current Location	
	Little or No Problem	Problem
Non-black male enlisted		
Nonjuniors (357)	215 60.2	142 39.8
Juniors (697)	379 54.4	318 45.6
	$\chi^2 = 3.04930$	$p = 0.0808$
Black male enlisted		
Nonjuniors (68)	38 55.9	30 44.1
Juniors (76)	43 56.6	33 43.4
	$\chi^2 = 0.0$	$p = 1.000$
Female enlisted		
Nonjuniors (8)	8 100.0	0 0.0
Juniors (26)	10 38.5	16 61.5
	$\chi^2 = 6.99309$	$p = 0.0082$
Non-black male officers		
Nonjuniors (408)	230 56.4	178 43.6
Juniors (689)	324 55.0	265 45.0
	$\chi^2 = 0.13060$	$p = 0.7178$
Female officers		
Nonjuniors (31)	15 48.4	16 51.6
Juniors (53)	25 47/2	28 52.8
	$\chi^2 = 0.0$	$p = 1.0$

Table C.9  
Crime as a Problem: Third Termers

Group	Alcohol Use a Problem at Current Location	
	Little or No Problem	Problem
Non-black male enlisted		
Nonjuniors (357)	245 68.6	112 31.4
Juniors (697)	457 65.6	240 34.4
	$\chi^2 = 0.86145$	$p = 0.3533$
Black male enlisted		
Nonjuniors (68)	48 70.6	20 29.4
Juniors (76)	54 71.1	22 28.9
	$\chi^2 = 0.0$	$p = 1.0$
Female enlisted		
Nonjuniors (8)	6 75.0	2 25.0
Juniors (26)	15 57.7	11 42.3
	$\chi^2 = 0.216515$	$p = 0.6420$
Non-black male officers		
Nonjuniors (408)	236 57.8	172 42.2
Juniors (589)	382 64.9	207 35.1
	$\chi^2 = 4.73710$	$p = 0.0295$
Female officers		
Nonjuniors (31)	23 74.2	8 25.8
Juniors (53)	31 58.5	22 41.5
	$\chi^2 = 1.47243$	$p = 0.2250$

recreation facilities; children's adjustment to PCS move; spouse's adjustment to PCS move; and respondent's own adjustment to the PCS move.

Table C.10 presents the relationship between parental military experience and problems with continuing education on PCS moves.

The chi square statistics indicate that a statistically significant relationship exists for non-black male officers, the largest part of the officer population. The concern with continuing education among non-black male officers is most likely due to the lower paygrade and lower education (Tables C.3 and C.5 above) among juniors who may still be pursuing educational goals that nonjuniors have already met.

#### 5. Morale at Current Location

Table C.11 presents the results of tests of the relationship between assessment of morale at current location and parental military experience. The t-tests of the differences in mean assessment of morale show statistically significantly lower assessment of morale by non-black male enlisted juniors. Their measurement of morale could be affected by their own morale which may have been adversely affected by the juniors' lower paygrade and civilian earning expectations (see Tables C.14 and C.15).

#### 6. Personnel's Ability to Perform Wartime Mission

The results of tests of the relationship between assessment of personnel's ability to perform wartime mission and parental military experience are presented in Table C.12. The t-tests of the differences in mean assessment of personnel's ability to perform missions show statistically significantly lower assessment of ability by junior female enlisted. This may be due to a different perception among juniors of what ability should be based upon experience during parent's military

Table C.10  
Continuing Education as a Problem on PCS Move: Third Termers

Group	Continuing Education as a Problem on PCS Move	
	Little or No Problem	Problem
Non-black male enlisted		
Nonjuniors (357)	295 82.6	62 17.4
Juniors (697)	565 81.4	132 18.9
	$\chi^2 = 0.29056$	$p = 0.5899$
Black male enlisted		
Nonjuniors (68)	56 82.4	12 17.6
Juniors (76)	57 75.00	19 25.0
	$\chi^2 = 0.75457$	$p = 0.3850$
Female enlisted		
Nonjuniors (8)	8 100.0	0 0.0
Juniors (26)	25 96.2	1 3.8
	$\chi^2 = 0.0$	$p = 1.0$
Non-black male officers		
Nonjuniors (408)	360 88.2	48 11.8
Juniors (589)	485 82.3	104 17.7
	$\chi^2 = 6.02859$	$p = 0.0141$
Female officers		
Nonjuniors (31)	24 77.4	7 22.6
Juniors (53)	47 88.7	6 11.3
	$\chi^2 = 1.13269$	$p = 0.2872$

Table C.11  
 Analysis of Differences in Morale\* at  
 Current Location: Third Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	355	4.1	1.66	2.50	0.0065
Juniors	691	3.8	1.52		
<b>Black male enlisted</b>					
Nonjuniors	66	3.7	1.61	0.63	0.2645
Juniors	75	3.5	1.61		
<b>Female enlisted</b>					
Nonjuniors	6	3.3	2.07	-0.70	0.2555
Juniors	26	4.0	1.58		
<b>Non-black male officers</b>					
Nonjuniors	406	4.5	1.47	-0.66	0.2535
Juniors	583	4.6	1.40		
<b>Female officers</b>					
Nonjuniors	30	4.0	1.17	0.61	0.271
Juniors	52	3.8	1.32		

\*Measured on a seven point scale with 1 labelled morale is very low and 7 labelled morale is very high.

Table C.12  
 Analysis of Differences in Personnel's Ability\*  
 To Perform Wartime Mission: Third Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	313	5.2	1.44	0.42	0.336
Juniors	653	5.1	1.54		
<b>Black male enlisted</b>					
Nonjuniors	58	5.2	1.57	0.25	0.402
Juniors	57	5/1	1.58		
<b>Female enlisted</b>					
Nonjuniors	5	6.2	0.84	2.74	0.009
Juniors	21	4.8	1.57		
<b>Non-black male officers</b>					
Nonjuniors	392	5.7	1.26	0.55	0.2905
Juniors	559	5.7	1.27		
<b>Female officers</b>					
Nonjuniors	28	5.6	1.13	1.56	0.062
Juniors	49	5.3	1.42		

\*Measured on a seven point scale with 1 labelled not perform at all and 7 labelled perform very well.

service, and to the concentration of females in "traditional" jobs such as yeoman or personnelman that may be isolated from the operational environment.

#### 7. Equipment's Ability to Perform Wartime Mission

Analysis of third term groups assessment of equipment's ability to perform wartime mission found no statistically significant differences between juniors and nonjuniors.

### C. CAREER AND REENLISTMENT INTENTIONS

#### 1. Years of Service Expectations

The t-tests of differences in mean years of service (Table C.13) the respondents expect to have when they leave the service show statistically significant differences in mean years of service expected for all male groups. The nonjuniors expect greater years of service. The difference between juniors and nonjuniors may reflect the lower paygrade for non-black male juniors, both officer and enlisted, and the early age of entry of the officer juniors, and the counting of Academy time into years of service.

#### 2. Final Paygrade Expectations

Table C.14 presents the relationship between the final paygrade the respondents expect to have when they leave the military and parental military experience. The t-tests of the differences in mean paygrade expected show statistically significantly greater paygrade expected by non-black male officer nonjuniors. The reasons for this difference are unclear, but since length of service and paygrade are closely related, the reasons are probably tied to those of the longer length of service expectations of the non-black male officer nonjuniors. Additionally,

Table C.13  
Years of Service Expected: Third Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	356	21.2	3.85	2.34	0.0095
Juniors	691	20.5	4.67		
<b>Black male enlisted</b>					
Nonjuniors	66	20.7	5.97	2.31	0.011
Juniors	75	18.3	6.33		
<b>Female enlisted</b>					
Nonjuniors	8	19.9	7.38	1.38	0.098
Juniors	24	15.8	6.61		
<b>Non-black male officers</b>					
Nonjuniors	406	24.1	4.46	2.12	0.175
Juniors	583	23.4	5.40		
<b>Female officers</b>					
Nonjuniors	30	21.8	3.38	1.14	0.1285
Juniors	53	20.8	4.29		

Table C.14  
Final Paygrade\* Expected: Third Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	356	7.6	1.33	-1.01	0.1565
Juniors	693	7.7	1.46		
<b>Black male enlisted</b>					
Nonjuniors	67	7.5	1.47	0.71	0.239
Juniors	76	7.3	2.13		
<b>Female enlisted</b>					
Nonjuniors	8	8.4	2.26	1.29	0.2225
Juniors	25	7.2	2.16		
<b>Non-black male officers</b>					
Nonjuniors	406	25.4	0.96	4.52	0.000
Juniors	587	25.1	1.31		
<b>Female officers</b>					
Nonjuniors	30	25.1	0.66	0.67	0.252
Juniors	52	25.0	0.94		

\*Paygrade was measured as follows:

E-1 (1), E-2 (2), E-3 (3), E-4 (4), E-5 (5), E-6 (6), E-7 (7),  
E-8 (8), E-9 (9), W-1 (11), W-2 (12), W-3 (13), W-4 (14), O-1 (21),  
O-2 (22), O-3 (23), O-4 (24), O-5 (25), O-6 (26).

since the nonjuniors have already attained a higher paygrade than juniors (Table C.14), this may have affected their ultimate expectations.

3. Likeliness to Reenlist

Analysis of likeliness to reenlist without a bonus or likeliness to reenlist for training showed no statistically significant differences between juniors and nonjuniors.

4. Earnings Expected in Civilian Job

Table C.15 presents the relationship between the earnings the respondent would expect at a civilian job and parental military experience. As in the second term groups, the t-tests show statistically significantly differences in mean civilian earnings expected for the non-black male enlisted, who constituted over 85 percent of the enlisted sample. This difference may reflect the higher paygrades of the non-juniors (Table C.5).

Table C.15  
Earnings Expected in Civilian Job: Third Termers

Group	N	Mean	S.D.	t-value	Prob.
<b>Non-black male enlisted</b>					
Nonjuniors	353	\$37,451.10	\$31,738.82	4.07	0.000
Juniors	685	29,454.08	26,269.08		
<b>Black male enlisted</b>					
Nonjuniors	65	39,971.51	4,250.25	-0.07	0.4705
Juniors	74	40,405.51	3,969.70		
<b>Female enlisted</b>					
Nonjuniors	7	24,984.00	28,704.46	-1.07	0.1525
Juniors	25	38,884.16	35,554.05		
<b>Non-black male officers</b>					
Nonjuniors	400	39,733.93	22,725.33	1.41	0.079
Juniors	579	37,657.53	22,358.85		
<b>Female officers</b>					
Nonjuniors	31	40,938.84	29,533.58	0.47	0.3195
Juniors	52	37,793.62	29,110.00		

APPENDIX D  
PROPORTIONS OF JUNIORS

Tables D.1 to D.5 present proportions of career juniors, other juniors, and nonjuniors for each of the five groups by year when entered service. Caution is needed in using this information, as later year groups reflect differences in both entry and retention behaviors, and since sample sizes for some year groups are very small.

Table D.1  
Proportions of Non-black Male Enlisted Juniors

Year Entered Navy	N	Percentage Nonjuniors	Percentage Juniors Whose Parents Had 0-10 Years	Percentage Career Juniors
1950	4	50.0	25.0	25.0
1951	1	0.0	100.0	0.0
1952	2	50.0	50.0	0.0
1953	1	0.0	100.0	0.0
1954	9	55.6	33.3	11.1
1955	8	62.5	25.0	12.5
1956	19	73.7	26.3	0.0
1957	22	45.5	50.0	4.5
1958	29	62.1	31.0	6.9
1959	67	34.3	61.2	4.5
1960	85	49.4	43.5	7.1
1961	89	40.4	52.8	6.7
1962	79	39.2	50.6	10.1
1963	86	26.7	62.8	10.5
1964	88	39.8	48.9	11.4
1965	105	31.4	54.3	14.3
1966	67	35.8	55.2	9.0
1967	92	34.8	48.9	16.3
1968	127	29.1	55.9	15.0
1969	136	19.1	66.2	14.7
1970	155	13.5	71.0	15.5
1971	217	21.2	65.0	13.8
1972	232	24.1	60.8	15.1
1973	228	24.1	57.9	18.0
1974	108	30.6	53.7	15.7
1975	405	16.9	70.1	13.8
1976	169	24.9	62.4	13.0
1977	114	24.6	61.4	14.0
1978	33	24.2	48.5	27.3

Table D.2  
Proportions of Black Male Enlisted Juniors

Year Entered Navy	N	Percentage Nonjuniors	Percentage Juniors Whose Parents Had 0-10 Years	Percentage Career Juniors
1950	1	100.0		
1951	0			
1952	0			
1953	0			
1954	3	33.3	66.7	
1955	4	75.0	25.0	
1956	7	57.1	42.9	
1957	3	33.3	33.3	33.3
1958	3	100.0		
1959	9	44.4	55.6	
1960	10	50.0	50.0	
1961	17	41.2	52.9	5.9
1962	14	57.1	42.9	
1963	8	50.0	50.0	
1964	7	57.1	42.9	
1965	13	38.5	46.2	15.4
1966	7	28.6	42.9	28.6
1967	6	33.3	66.7	
1968	8	37.5	50.0	12.5
1969	15	33.3	60.0	6.7
1970	25	36.0	56.0	8.0
1971	27	29.6	66.7	3.7
1972	46	37.0	58.7	4.3
1973	38	23.7	63.2	13.2
1974	26	53.8	34.6	11.5
1975	58	43.1	46.6	10.3
1976	104	38.5	55.8	5.8
1977	88	40.9	47.7	11.4
1978	18	38.9	50.0	11.1

Table D.3  
Proportions of Female Enlisted Juniors

Year Entered Navy	N	Percentage Nonjuniors	Percentage Juniors Whose Parents Had 0-10 Years	Percentage Career Juniors
1952	1	100.0		
1953				
1954				
1955				
1956				
1957				
1958				
1959	1			100.0
1960				
1961	1			100.0
1962	1	100.0		
1963	2		100.0	
1964	1	100.0		
1965	1			100.0
1966	2	50.0	50.0	
1967	1		100.0	
1968	2		50.0	50.0
1969	10	10.0	80.0	10.0
1970	5		80.0	20.0
1971	13	15.4	84.6	
1972	30	20.0	56.7	23.3
1973	45	13.3	64.4	22.2
1974	48	18.8	62.5	18.8
1975	114	20.2	64.0	15.8
1976	86	15.1	69.8	15.1
1977	132	16.7	63.6	19.7
1978	52	19.2	50.0	30.8

Table D.4  
Proportions of Non-black Male Enlisted Juniors

Year Entered Navy	N	Percentage Nonjuniors	Percentage Juniors Whose Parents Had 0-10 Years	Percentage Career Juniors
1950	15	46.7	53.3	
1951	11	36.4	45.5	18.2
1952	16	143.8	31.2	25.0
1953	22	54.5	40.9	4.5
1954	35	54.3	42.9	2.9
1955	36	52.8	33.3	13.9
1956	41	41.5	48.8	9.8
1957	45	57.8	28.9	13.3
1958	52	46.2	40.4	13.5
1959	70	48.6	44.3	7.1
1960	91	49.5	40.7	9.9
1961	68	45.6	47.1	7.4
1962	53	56.6	34.0	9.4
1963	62	38.7	46.8	14.5
1964	57	35.1	38.6	26.3
1965	56	41.1	42.9	16.1
1966	70	27.1	57.1	15.7
1967	79	29.1	51.9	19.0
1968	97	18.6	67.0	14.4
1969	68	16.2	69.1	14.7
1970	86	15.1	52.3	32.6
1971	64	21.9	54.7	23.4
1972	76	18.4	61.8	19.7
1973	94	9.6	69.1	21.3
1974	93	15.1	63.4	21.5
1975	90	23.3	55.6	21.1
1976	85	23.5	58.8	21.5
1977	93	16.1	62.4	19.7
1978	65	15.4	60.0	24.6

Table D.5  
Proportions of Female Officer Juniors

Year Entered Navy	N	Percentage Nonjuniors	Percentage Juniors Whose Parents Had 0-10 Years	Percentage Career Juniors
1952	1		100.0	
1953	1		100.0	
1954				
1955				
1956	3	66.7	33.3	
1957	3	66.7	33.0	
1958	4	75.0	25.0	
1959	5	40.0	60.0	
1960	8	25.0	75.0	
1961	6	66.7	33.3	
1962	11	45.5	54.5	
1963	3	100.0		
1964	4	75.0	25.0	
1965	6		83.3	16.7
1966	3	66.7	33.3	
1967	7	42.9	57.1	
1968	18		77.8	22.2
1969	25	36.0	32.0	32.0
1970	16	18.8	43.8	37.5
1971	16	18.8	56.3	25.0
1972	29	6.9	58.6	34.5
1973	44	18.2	65.9	15.9
1974	51	17.6	56.9	25.5
1975	28	28.6	64.3	7.1
1976	54	16.7	59.3	24.1
1977	100	10.0	66.0	24.0
1978	46	23.9	56.5	19.6

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